This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

A 446551 DUPL

What is Secondary Education?

A HANDBOOK FOR PUBLIC MEN AND PARENTS

THE UNIVERSITY OF MICHIGAN

DATE DUE

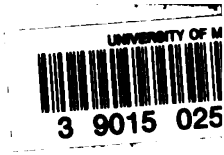
JAN 3 0 1982

DEC 1 4 1982

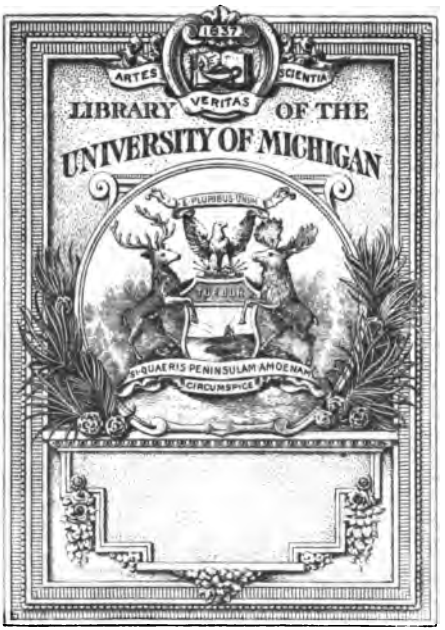
APR 6 1993

MAR 1 8 1993

UNIV. OF MICH.
APR 23 1910



DO NOT REMOVE
OR
MUTILATE CARD


1837
ARTES
SCIENTIA
VERITAS
LIBRARY OF THE
UNIVERSITY OF MICHIGAN
E PLURIBUS UNUM
TUEBOR
SI QUAERIS PENINSULAM AMOENAM
CIRCUMSPICE

LB
1603
.S43

WHAT IS SECONDARY EDUCATION?

" *Lay the sure foundations deep,*
Strongly lay them, lay them true:
Lo! there rise, when ye shall sleep,
Builders building after you."

J. H. SKRINE.

'What is Secondary Education?'

AND OTHER SHORT ESSAYS

BY WRITERS OF PRACTICAL EXPERIENCE
ON VARIOUS ASPECTS OF THE PROBLEM
OF ORGANISATION

A HANDBOOK FOR PUBLIC MEN AND FOR PARENTS
ON THE NATIONAL ORGANISATION
OF EDUCATION IN ENGLAND

EDITED WITH PREFACE, BY

R. P. SCOTT, M.A., LL.D.

HEAD MASTER OF PARMITER'S SCHOOL
JOINT HONORARY SECRETARY
OF THE INCORPORATED ASSOCIATION OF HEAD MASTERS

"Organise your Secondary Education."—MATTHEW ARNOLD, 1866.

RIVINGTONS
34, *KING STREET, COVENT GARDEN*
LONDON
1899

COMMITTEE

Chairman—R. P. Scott, Esq., M.A., LL.D.,
Parmiter's School, Victoria Park.

J. Easterbrook, Esq., M.A., Owen's School, Islington.

Rev. T. C. Fry, D.D., Berkhamsted School.

Miss F. Gadesden, Blackheath High School, S.E.

Miss M. H. Page, Skinners' School, Stamford Hill.

J. J. Robinson, Esq., Batworth Park, Arundel.

F. Storr, Esq., B.A., 40, Mecklenburgh Square, W.C.

Rev. R. D. Swallow, M.A., Chigwell School, Essex.

Rev. A. R. Vardy, M.A., King Edward's School,
Birmingham.

Treasurer—J. E. Williams, Esq., M.A.,
Mountside, Harrow-on-the-Hill.

Secretary—H. Bendall, Esq., M.A.,
37, Norfolk Street, Strand.

INTRODUCTORY

In November, 1898, at the instance of the Incorporated Association of Head Masters, a Committee was set on foot with the following Terms of Reference:—

> "To consider ways and means of conducting, through the Press and otherwise, a movement for the purpose of placing before the country the claims of Secondary Education to national aid and recognition, and to take steps accordingly; the expenses incurred by the Committee to be defrayed out of a special Press Fund, and not out of the general funds of the Association."

The Committee consists of six members of the above Association, together with four members connected with other Educational Bodies, and in February last was constituted as given on the opposite page.

The following extract from a letter, which was written by the Chairman of the Committee in answer to an inquiry as to the

205753

Re-classed

objects of the Committee, will show the general views taken by the Committee as to their functions, and the ground on which they seek public support on their undertaking :—

> "You ask what is the definite aim which this Committee has set before it, and what are the means by which it seeks to attain that aim?
>
> "The aim, briefly, is to inform public opinion with a view to raising the standard of Secondary Education, by requiring efficiency in teaching, in school-buildings, and in inspection. To make these requirements effective and continuous, it is necessary to set out in detail the principles involved in this branch of education, and for that purpose short Articles written by well-known educationists have been inserted week by week in seventy or eighty journals throughout the country.
>
> "You will note that the policy advocated is in a true sense national; educationally, it asks that the State should at length assume the responsibility of supervising the supply of Secondary Education; it recognises that Secondary, though distinct both from Primary and from Technical Education, is intimately connected with these, and that relations of the right kind should be established with each; administratively, it would advocate the recognition, under a national system, of

Schools maintained by private enterprise, and of religious teaching of a denominational character; but at the same time, it insists on efficiency in Schools of all types, holding that no waste is so serious as the educational waste now going on, the waste of living material—brain, body, spirit—which is undermining our national resources.

"To ensure wise and thorough reform, it is necessary to awaken and inform parents and the public in general; but this cannot be done without a campaign in which the Press and the Platform must be induced to act as allies. We need Articles, Paragraphs, Pamphlets, Public Meetings, and, at the back of these, organising faculty and sufficient clerical help.

"The writing and organising are, and always have been, an honorary matter: but organising power breaks down if insufficiently served in matters of detail, and this break-down is certain to happen now, unless aid is forthcoming from those who desire that efficient Schools at reasonable fees shall be placed within the reach of all, and that all children may be able to develop to their full extent, and for the good of the community, those faculties which God has implanted in them."

PREFACE

THE aim of this volume is to present to the reader a concise, but comprehensive, statement of the grave issues involved in the reform of English Secondary Education. The writers approach the subject from many points of view, and in the light of many different kinds of practical experience. But they are all at one in their conviction that the question is one of high national importance, and yet so complex in its nature that many of the conclusions arrived at should be regarded as in a manner tentative and approximate. Such an attitude in matters of education may be explained by the state of public opinion, which still leaves several important issues undetermined.

The Essays, most of which were originally written for publication in the press, and have already appeared in that form, have been drawn together from many sources, but form a series with a common aim. The

aim is to place before the public in a simple and intelligible form certain aspects of the problem of Secondary Education, so that the magnitude, the complexity and the national bearings of the issues raised by its organisation may be more widely and thoroughly understood.

The Essays treat of the aims and the principles which ought to characterise a national system of Secondary Education in England, and the subjects are deliberately viewed from the educational rather than from the administrative standpoint. Such questions, for example, as the constitution of local authorities, and the relations of such bodies, when formed, to the central authority, have been omitted, not because the writers ignore the need of, still less because they do not sympathise with the desire for the creation of proper administrative machinery, but because, at a time when a Board of Education Bill is before the country, it has seemed all-important to call attention to the purpose for which such machinery is to be designed, and above all to insist, in the interests of the nation, not only upon a high educational standard, but also, as Matthew

Arnold advocated a generation ago, upon an increase of the number of boys and girls under education on the higher intellectual plane.

The writers of the Essays, both men and women, are fully representative of all the branches of Secondary and Higher Education; they are of acknowledged competence and of wide experience; each is responsible only for the opinions expressed over his or her own signature, but their substantial agreement of view is no less remarkable than their willingness to act together in a common cause of acknowledged complexity, which includes such thorny questions as the place of Private Schools in a national system, the education of girls, the bearings of school education on citizenship, the public testing of schools and of teachers, the inter-relations of Primary, Secondary, Technical, and Higher Education.

The treatment of the subjects is intended to serve a practical purpose, and to meet the needs of the day; but it is hoped that these papers may effect something beyond and above this end of immediate utility. The English people may hereafter be brought to

realise the magnitude of the issues involved in the whole question; they may come to understand that a right system of education bears a vital and intimate relation to national efficiency in industry and commerce, to social as well as to intellectual progress, and as a consequence even to national supremacy in the future.

But in England we habitually shrink from considering great questions as a whole, yet none the less we proceed to act; we attempt to settle details before adopting principles, and, as a consequence, we burden ourselves with clumsy adaptations involving excessive delay. This treatment has specially characterised our dealings with Education and has retarded its progress.

Yet, in spite of every drawback, Education in this country is advancing, and will continue to advance; and although heroic measures are unlikely as ever to commend themselves to our unimaginative race, the forces which make for organisation are surely gathering strength, and by slow process will at length accomplish its appointed revolution in Education—a revolution carried out in the truly English manner, by due course of law.

CONTENTS

PAGE

Preface viii

1. **Organisation: the task which lies before the Nation** 1
   By the Editor.

2. **The Urgent Need of Reform—an Appeal to Parents** 19
   By the Hon. and Rev. Canon E. Lyttelton, M.A., Head Master of Haileybury College.

3. **Why do English People disbelieve in Education?** 25

4. **Why is Reform necessary?** 34

5. **Schools as they are: Secondary and other** . 40
   (i.) General conditions. By the Editor.
   (ii.) According to recent Statistics. By H. Bendall, M.A., Secretary to the Joint Scholarships Board.

6. **Secondary Education and the interests of the Empire** 51

7. **The National Aspect of the Reform of Secondary Education** 58
   By the Editor.

8. **Secondary Education and Citizenship** . . . 67
   (i.) By the Rev. Canon Barnett, M.A., Warden of Toynbee Hall, Whitechapel.
   (ii.) By the Rev. T. B. Strong, B.D., Student and Senior Censor of Christ Church, Oxford.

9. **Secondary Education and Self-Development** . 79
   By the Rev. T. B. Strong, B.D.

PAGE

10. Secondary Education and British Trade . . 85

By Gilbert D. Jennings.

11. The interest of Working Men in the Reform of Secondary Education 90

12. The interest of Ratepayers in the Reform of Secondary Education 97

By Cloudesley Brereton, M.A., L.-ès-L., Examiner in French to the Cambridge Local Examinations Syndicate.

13. The interest of Girls in the Reform of Secondary Education 104

(i.) By Miss Mary Gurney, Member of the Council of the Girls' Public Day School Company.
(ii.) By Miss Tullis, Principal of St. Catherine's School, Holland Park, W.
(iii.) By Miss Lumby, Principal of St. Hilda's College, Cheltenham.
(iv.) By H. Bendall, M.A.

14. Authorities for Secondary Education: Central and Local 128

By Graham Balfour, M.A., Assistant-Secretary to the Local Examinations Delegacy, Oxford.

15. The Board of Education Bill, 1899 136

(i.) By Graham Balfour, M.A.
(ii.) By the Rev. A. R. Vardy, M.A., Head Master of King Edward's School, Birmingham; President of the Incorporated Association of Head Masters.

16. The Safeguards of Organised Secondary Education 152

(i.) The Advisory Powers of the Consultative Committee. By H. Bendall, M.A.
(ii.) The Inspection of Secondary Schools. By H. T. Gerrans, M.A., Secretary to the Local Examinations Delegacy, Oxford.

17. What is Secondary Education? 164

PAGE

18. How can Secondary Schools be made and kept efficient? 172

By F. Storr, B.A., Chief Master of Modern Subjects, Merchant Taylors' School, E.C.

19. The desirability of Private Enterprise in Secondary Education 179

(i.) By the Rev. F. R. Burrows, M.A., Principal of Ancaster House School, Bexhill.
(ii.) By J. C. Tarver, M.A., Clayesmore School, Enfield.
(iii.) By the Rev. J. O. Bevan, M.A., formerly President of the Private Schools Association.

20. The Relations of Secondary to Elementary Education 198

(i.) By Sir Joshua Fitch, formerly H.M. Chief Inspector of Training Colleges.
(ii.) By H. L. Withers, M.A., Principal of Borough Road Training College, Isleworth; formerly Assistant Master at Clifton College.
(iii.) By Miss Mary H. Page, Head Mistress of the Skinners' School for Girls, Stamford Hill.
(iv.) JOINT MEMORANDUM ON THE RELATIONS OF PRIMARY AND SECONDARY SCHOOLS TO EACH OTHER IN A NATIONAL SYSTEM OF EDUCATION.
[Parliamentary Paper, No. 381, August, 1898.]

21. The Relations of Secondary to Technical Education 231

By C. H. Draper, D.Sc., Principal of the Municipal School of Science and Technology, Brighton.

22. The Relations of Commercial to Secondary Education 240

By David Howard, F.C.S., F.I.C., Vice-President of the London Chamber of Commerce.

23. The Relations of Secondary to Higher Education 245

By Arthur Sidgwick, M.A., Reader in Greek to the University of Oxford.

PAGE

24. (i.) Uniformity in Education 253

(ii.) What different kinds of Secondary Schools are needed? 264

By James Gow, Litt.D., Master of the High School, Nottingham.

25. Liberal and Technical Education 270

26. What different kinds of Technical Institutions are needed? 287

By C. H. Draper, D.Sc.

27. Technical Institutes and Secondary Schools . 296

By J. W. Longsdon, M.A., Travelling Instructor to the Surrey County Council.

28. Technical Education for Girls 302

By Miss A. J. Cooper, formerly Head Mistress of Edgbaston High School for Girls.

29. Organised Education and the Teacher . . 308

(i.) The Teacher and the State. By J. C. Tarver, M.A.

(ii.) The Registration of Teachers. By the Editor.

(iii.) The Training of Teachers in Secondary Education.
(*a*) By the Hon. and Rev. Canon E. Lyttelton.
(*b*) By Miss A. J. Cooper.

30. Curricula in Secondary Education 333

(i.) The Place of the Humanities in Secondary Education. By G. Lowes Dickinson, M.A., Fellow and Lecturer of King's College, Cambridge.

(ii.) The Place of Science in Secondary Education. By L. C. Miall, F.R.S., Professor of Biology; and Arthur Smithells, B.Sc., Professor of Chemistry in the Yorkshire College, Leeds.

31. Why not organise the Teaching Profession? 349

By the Rt. Hon. James Bryce, M.P., late Chairman of the Royal Commission on Secondary Education.

(1.) ORGANISATION: THE TASK WHICH LIES BEFORE THE NATION

By the EDITOR.

Education and the State.

THE relation of the State to Education is a subject which has not hitherto received in this country that share either of public attention, or of legislative action, which its national importance demands, and which has long been accorded to it on the continent of Europe and in the United States.

Inaction in England due—
i. to national instinct;
ii. to economic changes.

Such inaction in England is due as much to certain traits of national character, as to social and economic conditions. We act, or refrain from acting, rather in unconscious obedience to a kind of moral instinct than in pursuance of a reasoned and logical course of action. We are a practical, not an intellectually imaginative people; we are content less to foresee needs than to provide for them generously as they arise. Neither the synthetic imagination which sees a subject as a whole, nor the analytic faculty which distinguishes the constituent parts appeals

strongly to us. At bottom, we feel—as has been well said—that character, not intellect, governs this world and inherits the next. We are, therefore, apt to disregard the need to develop the intellectual side of the individual, knowing it to be of small importance compared with the moral side; and we are consequently apt not to consider what the result such neglect may ultimately have upon the future of the nation itself.

Furthermore, the incompleteness of our point of view has been more or less hidden from us by the vast economic changes of the past fifty years, during which we have enjoyed an unexampled period of commercial and industrial prosperity. As a nation, England has been growing richer year by year, and, while it is doubtful whether she has altogether escaped the coarsening of character which follows a lengthened period of material welfare, she has certainly not utilised this season, as she should, in making provision to meet the inevitable calls of the future.

The struggle for existence among nations makes call on the intellect as well as on the character.

The strength of a nation does not depend now, as of old, simply upon physical force. As civilisation advances, the struggle for existence changes its form and makes its claim less upon the body than upon the intellect and the character of the citizen. Under these circumstances, that nation is strongest which has the largest store of

intellectual power, of moral force, and of commercial and industrial vigour. No nation can be said to enjoy an assured prosperity unless, amid that prosperity, it secures for the benefit of the rising generation conditions that will favour moral and intellectual growth.

Education, rightly understood, is of vital importance to the State, because without education, the forces of the community—whether intellectual, moral, or spiritual—run to waste, and there alone where education is rightly administered, will these forces be developed, mobilised, and guided for the collective welfare.

The task of the Minister of Education.

But the task of the statesman who, in England, attempts to realise such a conception will be neither easy nor simple: he must be content to innovate gently, and to persuade at every step; he must evolve order out of confusion; he must create an organic and yet intelligible system, he must take into consideration the diversified needs of a complex community. He will have, in fact, many responsibilities, and yet he will find it difficult, at the outset at least, to secure that liberal financial support which most civilised nations accord to Secondary Education, and which, even in England, is not denied to Primary Education.

Nor will these be his only cares. His first, most necessary, and most arduous duty will be to

create in England a genuine and intelligent interest in the question of Education. At present only a small minority of English people really believe in its value. Until this is changed, until a really effective public opinion is brought to bear on educational matters, our best efforts will often be fruitless, and our most elaborate machinery disappointing in its results.

But to the task of the statesman will be added the problems of the administrator: so to contrive that the elasticity in details which is requisite for individuality in educational development may be accompanied by that precise observation of effort which is necessary, first for intelligible classification, and next for subsequent progress on wise lines; to make free use of the experience of both teachers and officials, but not less to avail himself of the detached criticism of sensible men and women who have observed the product of the schools and judged its value for the everchanging needs of life. And, in the sphere of actual administration, to carry out the gradual decentralisation which is so much needed in order to evoke in each locality a true sense of financial and personal responsibility for public education, a responsibility which will be a delusion, unless something beyond mere detail is devolved on Local Authorities. On the [illegible] hand, he must not roughly break up int[illegible]ts the expe[illegible] already gained, nor [illegible] destroy [illegible]ting machinery for

Central Government, but must establish a new and more continuously intimate relation between the Local Authorities and the Central—a relation which will dignify the first by making them always participate in the discussion and decision of principles, and vitalise and humanise the second by bringing it into organic and personal connection with the ever-growing and ever-changing experience gained by close touch with local affairs.

No individual statesman, perhaps, can do more than write the first chapter of such a work as this, but to plan out an educational policy on so noble a scale as to bring within its compass the various elements which must go to make up the education of a free people—to do this would secure for him the lasting gratitude of his fellow-countrymen.

The following essays may serve, as regards the Reform of Secondary Education, to indicate the magnitude of the task, and the forces and the materials which are available.

The tendencies which make for the organisation of Education—

The movement for organising Education is the resultant of various forces or tendencies which may be broadly classed under three heads, as social, administrative, and professional.

i. Social:
(*a*) Increasing desire for greater equality of educational opportunity.

In the social movement which is making for the reorganisation of our national system of Education

two chief tendencies may be traced. In the first place, the nation is stirred by an increasing desire for greater equality of educational opportunity. This feeling is at present less noticeable among the labouring classes themselves than among those who are touched by the feeling that others unfairly lack opportunities which they themselves have enjoyed. As has often been the case with social changes in England during the last hundred years, it is because the conscience of the more sensitive among the educated classes has been touched, not because the artisan or labouring classes are actively demanding educational reforms, that the improvement of facilities for education in this country has come within the range of practical politics. In England the most effective spur towards social reform has often been a feeling of *noblesse oblige.* It is to the honour of our country that this is so, and it has contributed greatly to the happy and peaceful development of a new social order during the present century. But the less admirable side of the tendency to bring about social changes in order to meet what we think should, or will, be the needs of others less fortunately placed, is that it brings about changes which do not spring out of the actual requirements of the poor, and are therefore ill-adjusted [illegible] their real needs. In Education especially [illegible] schooling supplied to the poor has not bee[illegible] and skilf[illegible] adapted to their

real needs, but rather represents a somewhat pale, diluted, and less efficacious form of the kind of instruction which could have suited their benevolent advocates in their own childhood. Nevertheless, the democratic and collective impulse is a real factor in the educational movement which so conspicuously marks the present time both in Europe and in America. And no one who takes the pains to acquaint himself with the intensity of popular zeal for education in the United States can doubt for a moment that we are only at the beginning of a corresponding movement in this country. One of the most urgent, importunate, and party-splintering questions which loom in the political future is that of Education. With it are necessarily bound up the social question and the religious question. It will, therefore, be the part of wisdom to deal with the matter betimes, and in a practical way, before the sense of intolerable grievance becomes so fierce as to preclude that cautious and moderate treatment which will best adjust old educational institutions to new social needs.

i. Social:
(*b*) Greater Economy in production and distribution necessary, and for this more trained intelligence needed.

In the second place, the social movement is due to a growing perception of the effect produced on commerce by Free Trade and by modern improvements in machinery. Facility of communication due to improvements in machinery tends to lessen distance, and to bring the

markets of the world closer to each other. The increasing use of machinery tends to cheapness and large production. These results, combined with the effect of Free Trade, make international rivalry in commerce more acute year by year, and make markets increasingly sensitive; and it is widely becoming recognised that we, as a nation, cannot meet this competition without more economical methods of production and distribution. The home workshop has given way to the factory, and the small trader yields to the Limited Liability Company, and though the volume of trade may continue to increase, the percentage of profit decreases.

For this state of things, whether we consider the effect on home or on our foreign trade, there is but one effective remedy, and that is, to enlist in the service of trade and commerce, far more than has hitherto been the case in England, the trained intelligence of the workers—or, as a *Times* correspondent phrases it, to "put more brains into export" than we have hitherto thought to be necessary. In Germany, as the same writer points out, this maxim is already definitely understood, and is acted upon with ever-increasing success.

These things will have to be seriously faced by us as a nation, and the sooner the better. For, even if we begin to reshape our educational system at once, the results of the change cannot become widely effective for at least a generation, during

which time our trade rivals will be increasing more and more the start which they have already acquired. The attention of the public to the improvement of education for the purposes of commerce has hitherto been directed mainly to so-called Technical Education, as being the branch of the subject more immediately concerned, but a study of the systems of education in vogue on the Continent, reveals the fact that Technical Education is most effective after the age of sixteen, and when based on a good Secondary Education of a general and non-specialised character.

The Special Reports issued of late by the Education Department have been of singular service in pointing out that other nations of the world are, like ourselves, realising the pressure of international rivalry, and that they are endeavouring to meet this pressure by improving education in all its branches.

We have here, in fact, a world-problem and a world-attempt at its solution.

ii. Administrative: Economy in administration demands a full knowledge and wise guidance.

The administrative movement in favour of organisation is due to the fact that central authorities, as well as local authorities, are realising the loss of power consequent upon divided responsibility and upon overlapping of jurisdictions. The Board of Education Bill of 1899, is a natural and well-advised step towards consolidation of educational

powers into a strong central office under a responsible Minister. But so far as education, apart from mere organisation, is concerned, it is not more important to constitute a consolidated central authority than it will be to authorise local authorities to deal with the various branches of the subject, and when the lines of demarcation have been made reasonably clear, to hand over to such authorities the details which a central office cannot effectually undertake.

Moreover, the tendency of recent legislation, specially noticeable in the Local Government Act of 1888, has been to devolve more and more power upon local authorities. One side of this new activity is seen in the interest which counties and county boroughs take in education, especially in its Technical side, and in the claim they make to administer Secondary Education within their respective areas. This claim is worthy of hearty support, provided that sufficient guidance be afforded in this complex matter by a well-constituted central authority, and provided also that local authorities avail themselves of the best educational knowledge and experience obtainable.

Without central guidance, a view of education limited to considerations of immediate utility would be likely to prevail; just as, without educational experience on the local authority, the tendency to provincialism would undoubtedly result in a certain narrowness and uniformity.

But it cannot be denied that the success of the Local Secondary School will depend upon its winning and retaining attention in its locality, and this it will do, the more its work is brought into touch with the real needs of the locality, and the more it consciously endeavours to meet those needs. To establish and to maintain fruitful relations between local school and local authority —relations which ought to be based, not merely on conditional grants but on service rendered and recognised—is a task calling for no mean effort; its performance demands from the officials of local authorities, not only considerable knowledge of education, but some degree of sympathy, of insight, and even of statesmanship; for if this work is to be well done, the too prevalent belief in mere machinery must give place to a clear understanding, both of its limitations and of the purpose for which it was designed.

iii. Professional: Economy in educational effort requires intelligent public interest: this impossible if aim vague or methods unintelligible.

But, after all, it is the teaching profession itself that has called most persistently for the reform, the systematising, and the organising of Secondary Education, more persistently even than the merchant who fears for his markets, or the local authority desirous to meet the ratepayers' needs.

To teachers above all the results of the present confusion of authorities and of schools have come

home: several bodies of teachers have endeavoured to demonstrate to the nation how public money is wasted, how energy is dissipated, and how in the present chaos the child loses those golden opportunities which ought to be secured for him.

Recognised Standards of Comparison necessary—

(*a*) Standards of accessibility necessary.

Confining our attention in the main to the middle Secondary Schools, since these make up the bulk of what may be called the local provision of schools, and constitute the class which is most in need of supervision and reform, we may point out that there are many populous districts without suitable Secondary Schools: on the other hand, there exist districts which have so many such schools that all alike lead a precarious and shrivelled existence: in some few favoured spots, like Birmingham and Bedford, liberal endowments keep good schools at a high state of efficiency on low fees; but, contrary to a prevailing impression, the endowment in the majority of Grammar Schools is miserably inadequate, and, owing to agricultural depression, steadily decreasing.

(*b*) Standards as to qualifications and salary of teachers necessary.

As to teachers in Secondary Schools, unlike their compeers abroad or Elementary Teachers in England, there is no authorised test of fitness, no absolute minimum of qualification to teach; and with many Secondary School teachers the interest in professional training

is still languid. This attitude is intelligible enough; we have not yet worked out any satisfactory system for the Training of teachers, which sufficiently recognises that the best and most enduring work of a good teacher is done, not in the class-room only, but also through games, through school societies, and through the various relationships set up between teachers and taught in the complex life of a good school. But notwithstanding that the standards of training hitherto proposed are felt, and rightly felt, to be inadequate because they are mainly intellectual tests, yet there is an urgent need that a higher standard of intellectual qualification should be regarded as an essential part of the outfit of teachers in Secondary Schools. This means, as the most essential change of all, far more adequate salaries for the Assistant Masters and Assistant Mistresses. At present, in a very large number of cases, these are scandalously underpaid. Teaching in Secondary Schools must be made a career which will both attract and retain those who are fully qualified to keep the work and tone of our Schools up to a high level. Systematic provision must be made for equipping the teachers of modern languages, and for the formation of first-rate staffs of teachers for non-classical schools. And the public should have some convenient means of ascertaining—*e.g.* by reference to a public register—the precise nature of the intellectual qualifications (so far as these

can be attested by certificate), and of the range of the practical experience possessed by any teacher.

(c) Standards of building and school equipment necessary.

Furthermore, since there is no recognised standard as to what a Secondary School ought to possess in the way of buildings and equipment, playgrounds and playing-fields, schools of the same status often vary as much in these, as in other respects. In some schools the buildings are comparatively new, and are fitted with all modern appliances; they are well furnished, well lighted and well designed for their purpose, but in other places the buildings are old, are insufficiently furnished and are inconvenient. And in the absence of any recognised standard in such matters it is extremely difficult to bring effective pressure on even well-to-do Governing Bodies to remedy such shortcomings.

(d) Standard tests of the work of schools necessary.

As the teachers and the buildings are subject to no authorised test of efficiency, so also there exists no real and adequate test of the work of the schools. In the three or four hundred schools which are under the Charity Commissioners, it is required by the School Schemes that an outside examiner be annually appointed by the Governing Body [illegible] as there is no indication of the sum to be [illegible] such examiner, it is almost a matter of [illegible] how detailed [illegible] examination is. Furt[illegible] ven when [illegible] ble

sum is paid to a University Body to examine, the utter absence of a standard of comparison between similar schools deprives even such a report of much of the value which otherwise it would possess. The majority of Secondary Schools and other non-public Elementary Schools are under no compulsion as to examination or inspection, and in consequence few schools are actually inspected; most schools content themselves with entering a small percentage of their scholars at the Oxford and Cambridge Local Examinations or at the Examinations of the College of Preceptors, and the public acquiesces in the arrangement. But each of these examinations, by extreme elasticity of subject-option, and by over-classification of candidates, fails to set up any definite standard of attainment which can be generally understood.

(*e*) Standard courses of study necessary.

And lastly, the educational aim of the ordinary middle Secondary School, except so far as defined by examination regulations, is in general only less vague than the curriculum or course of study on which presumably the work is based. Neither aim nor curriculum necessarily corresponds to any definite conception: in consequence the education given at a Secondary School in England and the conditions under which it is given are alike indeterminate—a fact which largely explains the indifference with which Secondary Education is too generally regarded.

(*f*) Standards of cost of efficiency necessary.

What the public need, and what the State should furnish, is an approximate and recognised standard for the work of each different type of school, a standard for the tests of efficiency of each school and teacher, and an authoritative pronouncement of the cost of efficiency in the different types of schools. When statistics of this kind are forthcoming, and not until then, will Secondary Schools be able to count upon that intelligent interest and appreciation of their work upon which their real success and usefulness ultimately depend.

It cannot be doubted that the amount of public aid necessary for all-round efficiency must be considerable, for if the proper tools are provided, which include adequate playgrounds and playing-fields, as well as well-equipped buildings, if teachers are sufficient in number and are adequately paid and if classes are not allowed to exceed thirty, or about half that number in language subjects, and, moreover, if adequate and efficient inspection be provided, it will be found, buildings and equipment being given, that in Middle Schools an expenditure from £15 to £20 per pupil for tuition will be required, and in High Schools from £20 to £30 at least.

To meet this sum when [illegible] there are only four sources, viz. End[illegible] [illegible]uding in some [illegible]es subscriptions), [illegible] Gran[illegible] [illegible]e

State, and Aid from Local authorities. The State Grant would presumably be the same in similar types of School; Local Aid might be regulated, partly by the size of the school, and partly by the character of the district; the School Fee would then depend partly on the Endowment (if any) and would be calculated to make up the remaining cost per head. This would not result in a uniformity of fee, but it would make clear the object for which the fee is charged, and the relation it bears to the support given by the State and by the locality.

The Finance of the subject all-important.

In conclusion we may thus sum up the importance of a firm grasp of the finance of the subject. The efficiency of Secondary Schools is a matter of national importance, and efficiency implies a normal cost for each separate type of school. As yet no classification of types of schools exists, and consequently the principle of normal cost has not hitherto been recognised, nor have any statistics as to cost been collected in sufficient detail or over a sufficiently wide area. One of the first tasks which an organised Education Office will have to perform is to collect and compare such statistics; to classify Secondary Schools according to the varying conditions of size, locality, endowment, kind of education given; to note the degree of the efficiency which corresponds to adequate or

inadequate income; and to issue for the benefit of Local Authorities, Governing Bodies, and the public generally the conclusions thus arrived at as to the normal cost of efficiency.

It is certain that until the finance of Secondary Schools be thus looked at collectively as well as individually, we shall not attain in England, even in the case of similar and similarly placed schools, any uniform and recognised level of efficiency. But if the aims and the work of Secondary Schools be widely understood and properly valued; if the normal cost of efficiency be ascertained and officially declared; it cannot be conceived that this wealthy country will allow itself to be handicapped in comparison with other nations, by withholding the money required for creating a national and efficient system of Secondary Education.

(2.) THE URGENT NEED OF REFORM

By the HON. AND REV. CANON E. LYTTELTON,
Head Master of Haileybury College.

An Appeal to Parents.

NOT long ago a member of Parliament remarked that the Government would not pass any Bill for the organisation of Secondary Education till we had suffered some heavy commercial defeat, and then it would be passed in a panic. No one who knows anything of England, or of politics, or of committees, or of commerce, can doubt that this sinister utterance contains a great deal of truth. To pass any Bill nowadays requires a deal of motive power. Where is this power to come from in the case of an Education Bill? It ought to come from the parents of boys and girls whose training is being jeopardised by the present chaotic state of things. I do not wish to rest this plea on any other ground than this: that if parents really care how their children are being brought up, it is their bounden duty to concern themselves with such matters as the supply of schools, the fitness of teachers, the financial conditions under which teachers work, and the proper correlation of

schools. At present all these important points are very inadequately attended to, simply because the idea that the training of a child's mind is all-important to his character is one which has only very partially penetrated the mass of English people.

Not only is this deplorable in its effect, but the fact itself, apart from its effect, is a dismal revelation of the insecure hold that we as a nation have on vital principles. How in the world can the guidance of the growth of a child's mind be a matter of indifference to his father? Indeed, let us put the question in another way. How can the training of my neighbour's son be a matter of indifference to me, a citizen of this great country? The future of the country depends quite as much on my neighbour's children as on my own; and yet if I pass my days in blank ignorance where and how and by whom those children are being influenced during the better part of nine years of the most impressionable part of their life, nobody thinks it in the least strange. But as soon as I betray a conviction that everything depends upon these very questions, and that to ignore them placidly year after year is the very acme of human folly, I am reckoned a nuisance, a bore, and a faddist.

What Secondary Schools should

There died a man eleven years [illegible] more who was [illegible] this by

many superior persons; but to others he always gave the impression of being something of a true prophet: that was Thring, the headmaster of Uppingham. How finely in his diary does he lay down the principle that school, where boys are to pass so much of their time away from home, must be in its influence better than home, else what right has any one to entice children away from their parents on plea of training them, when the obvious dictates of nature are inevitably set at nought by the change? But as soon as ever this is admitted, then comes the next question: Do we any of us care a fig what sort of schools absorb our neighbour's children, what are the aims of the masters who teach them, and so forth, so long as we think we have secured a decent educational establishment for our own youngsters?

What they are.

If we did, we should make anyhow a few inquiries. If we inquired we should find out some facts which might cause even us to reflect. Among them are these: that a vast number of boys and girls are being influenced for weal or woe—mostly the latter—in miserable travesties of schools, no better—except in the matter of physical treatment—than Dotheboys Hall; that in many seminaries of a less degraded sort the masters are still the refugees from other professions, in the sense that they have taken to teaching after failing miserably in other lines; ideas they have none, except how

to extort money from the gullible, and by dint of concentrating their whole attention on one object all through life they, like Bismarck and other great and estimable characters, achieve success. They do extort money; they have no notion whether they teach or why they teach, or what teaching means; they must often be astonished that the supply of children of the gullible seems to hold out so well; they must be permanently keeping the tongue in the cheek; but no matter, if the children keep coming, into what they turn them. Nobody seems to care—why, then, should the schoolmaster, so long as he somehow makes a modest though dingy and dishonourable "pile" against his dingy and dishonourable old age? This is the sort of thing that is going on. The patriots talk tall about the future of England, and I am not one to belittle it; but there is a huge amount of preventible waste of fine material, good brains, good bodies, English common sense, English uprightness; all because we don't care enough for our neighbour's children to ask what is becoming of them when they go to school.

What they require.

Not that asking a casual question is enough. Supposing we ascertained—as we certainly should—that crowds of these children are being mentally starved and stunted in [illegible] garly Secondary Schools. The wo[illegible] ing this is that remedies must [illegible] he remedies are

simply that the schools shall be registered, judiciously inspected, and the teachers trained and certificated. The situation requires this *at least;* and the smallest acquaintance with the subject reveals to us that this means legislation, and legislation means rousing public opinion till the very prudent Cabinet now in power is stirred to action. Of course there is a danger to avoid. It is a danger before our eyes in France, and to a less degree in Germany. We will never forge fetters for our schools, because we are a freedom-loving people, and some of the best men in England have come under the influence of great teachers who have been left free to make experiments. But that is no sort of reason why the country should allow a pack of impecunious charlatans to persuade the great gullible public that they can do the most difficult thing in the world perfectly if only they are sufficiently paid for it. It is a fact that the influential leaders of public opinion have mostly been brought up in schools exposed to a healthy breeze of public opinion, a kind of constant unmeddlesome inspection, so that they cannot seriously deteriorate without being found out. But the case with scores and scores of ephemeral small schools is exactly the reverse. They flourish like noxious weeds in the dark.

It is worth mentioning, in conclusion, that the agitation for the training of those who are to teach the young proceeds from an unexpected quarter.

We should expect that the parents of the pupils would be anxious about the efficiency of the teacher. Not a bit of it. This righteous demand proceeds from other teachers: men and women who have been long enough at it to know what an unspeakably great work it is, and how supremely it makes a claim on the highest and best faculties within us; and how the seed sown in patience and faith, with all the vital energy of a life consecrated to a noble end, must be fostered with skill, or the living principle within it will die; how, in short, the native gift for teaching must be supplemented by practice, discipline, and guidance. All this is asked for on behalf of the young of England by those who know what bringing up a young mind really is; but their insistence is worth little unless those most interested support their demands: and those most interested are the parents of the pupils.

(3.) WHY DO ENGLISH PEOPLE DISBELIEVE IN EDUCATION?

English individualism.

WHY is it that so large a part of the English people does not yet effectually believe in education? Partly because education means discipline, and the mass of a nation does not take kindly to discipline, unless some great change in its fortunes has made it see in discipline its chief hope of deliverance or recovery from pressing evil. But this is not the only cause of our comparative indifference to education. It is of no good to set up machinery until you have decided what kind of stuff the machinery is to make. Similarly with schools: a school is an instrument for the production of a kind of character or a kind of aptitude which the nation needs. For good or for evil, we in England are at the bottom of our hearts far more deeply divided as to our ideal of national character than appears to be the case with some of the continental nations whose educational systems are more spick and span. No power has ever yet crushed out our moral minorities. Hence our real strength—hence the fertility of our resource

—hence the characteristics of our free national life. For centuries England has given shelter to the obdurate minorities who have been driven out from their own countries. This intermixture of various ideals of life and of convictions as to the relation between the individual and God, and between the individual and the State, has necessarily resulted in a tangled skein of political interests and institutions — practically tolerable and even convenient, theoretically incongruous and illogical.

Foreign collectivism: i. France.

Now, a formal educational system, such as exists in Germany, and, so far as the State schools are concerned, in France, implies in principle (though it may be far from securing in practice) an underlying unity of conception as to the ideal of individual citizenship and as to the duty of the State. This unity England does not possess; it is contrary to the whole course of her more recent historical development that she should possess it, in that degree of detail which is presupposed by a carefully organised monopoly of public schools. In the education of children, moral influences matter a great deal more than intellectual. To this conviction England has held firm, and it is greatly to her honour that she has done so. France decided to act on the assumption that a [illegible]ellectual education would [illegible] with it [illegible]sultant moral benefit [illegible]erefore [illegible] need only con[illegible]

secular education. This view has left a deep mark on certain types of educational opinion in England. But every year's experience is weakening the position of those who thus underrate the predominant importance of moral influences in education. We shall never agree in England to cancel our moral differences, and agree in supporting a purely secular system of education with a monopoly of State recognition and support. That policy, even if we agreed to try it, would, in point of fact, provide no real escape from our difficulties, because we cannot eliminate the moral element from education. A secular school has its own moral tendency —and that a tendency which vast numbers of Englishmen can never approve.

ii. Germany.

Germany has taken the precisely opposite line to France. She has frankly recognised the essentially moral element in all education. But partly for the sake of economy in administration, partly for other and less worthy reasons of State, there is at present a tendency in Germany to disregard, and even to attempt to crush out, the points of view of certain minorities who dissent from the official conceptions of what is desirable in many fundamental points of government and ethical aim.

Free spirit in England.

This in England we shall never tolerate. Ours is the genius of a free people. We must allow for

variety of convictions. We cannot exist without the right of free expression of opinion on moral and religious questions. To great numbers of English people nothing matters in comparison with this. Better poverty, better imprisonment, better national disaster than any curtailment of the freedom of conscience. And freedom of conscience implies freedom to teach what you believe. And freedom to teach what you believe implies variety of schools. And variety of schools means the lack of a tidy national system at once orderly and uniform and cheap. In short, the English ideal of a national system of education is a far more complex thing than the current German or French ideals. It aims not at uniformity upon a high average level of intellectual efficiency, but at a synthesis of varying types of school, reaching, through freedom of development, their own characteristic ideals of true efficiency. And you cannot have freedom for good schools without freedom for bad schools too. In short, we must pay for freedom at the price of tolerated inefficiency.

These are the feelings which lie behind, and have always lain behind, much of the passive resistance offered by English opinion to elaborate schemes of State education. But if these feelings are frankly and honourably recognised, if the national conviction, that the moral element in education is more essential than the purely intellectual, is admitted, then the way begins to

open to a new conception of national education—a conception which embodies a number of diverse, though not necessarily discordant, elements and which, while preserving their separate identity, retains, presents, and wisely develops them as parts of a great whole.

Limits and aims of Educational reform in England.

As a nation, we cannot afford to allow to continue in England the present degree of educational insufficiency and waste. We are spending, publicly and privately, a great deal of money which is virtually (though not intentionally) wasted. This chiefly comes through not having made clear in our minds what our educational aims shall be. On the other hand, as a nation we can never bring ourselves to tolerate State-control over conscience—and that is in effect what a rigid monopoly of State Education does mean and must mean. It is for England, therefore, in this as in many other branches of political and national development, to discover a middle course which shall, so far as may be, avoid intolerable waste on the one hand, and intolerable interference on the other. To mark out the course, to smooth the way by which the nation may be brought to it, is the chief task of the statesman who shall deal with our national education. He has to find a form of educational unity which shall be neither *laisser faire* nor public monopoly. Financial reasons, coupled with the

urgent need for general efficiency, forbid the one: our underlying deep moral convictions would soon explode any serious attempt to enforce the other.

But in order to bring about this wider agreement upon the aims and methods of national education, it will be necessary to face the fact that a good deal of so-called "education" is poor stuff. In its true sense, education must be a preparation for life. But, as at present applied, it seems in some cases to operate rather as a disqualification for life. All depends, of course, on what we mean by "life." If we find a course of instruction unfitting boys or girls to apply themselves rightly to, and in due time to excel in, the calling which they desire to follow, and which they are physically, morally, and intellectually qualified to follow, the presumption is that there is something wrong with the course of education. That is to say, the scholars are being taught the wrong things or taught in the wrong way. But it is by no means a just reason for blaming education if it renders young people unwilling to submit to remediably bad conditions of work. It is not the business of the school to break in the rising generation to wearing unnecessary fetters on mind or body, but rather so to enlighten their minds [illegible] they may be able dispa[illegible]y and t[illegible] to distinguish be[illegible] u[illegible] mitants of h[illegible]

conditions inevitable and necessary to be borne, and those which are removable or capable of change at a cost not prohibitive under the economic conditions of our time. And the school must do more than this; it must furnish, not only enlightenment, but faith and aptitude—faith in the slow working out of future good, without which citizenship is paralysed by pessimism, and aptitude for the skilfully trained and happy exercise of natural powers. In this sense the school, rightly understood, is a preparation for life—not a preparation for industrial life only, or for agricultural life only, or for professional life only, but for any one of these, and simultaneously for the life of citizenship, and for a life of God-fearing duty, and of faithful following of the ideals of conscience. That is to say, with due regard to what is practicable and convenient, the school must prepare children not merely for life as it is, but for life as it may be made by the loyal, intelligent, and thrifty co-operation of reasonable men and women.

Higher ideals of School work needed.

But judged by this standard, many of our schools fail to fulfil what should be their purpose. And it is to a feeling that they do so fail, that much of the opposition to educational expenditure is really due. For example, large numbers of practical people feel that much of the teaching in our village schools is at a wrong angle to the actual needs of life. They feel, however

too ignorant of the technique of educational matters to be able to make detailed suggestions as to the line which reform should take. They therefore content themselves with grumbling, or even ally themselves with those who oppose education, because it tends (and rightly tends) to produce discontent with remediable wrong. What we need is some movement of opinion which will separate the mere obscurantist from the reasonable but cautious reformer. The latter is to-day nearly as much repelled by the vain claims of bookish education as he is by the undisguised selfishness of the Tony Lumpkins, who wish at any cost to "keep the poor in their place" without any vigorous resolve to make that "place" one in which the rural labourer will be free from the degradation of intellectual and moral servility.

Education to be correlated with Life.

Education is not a matter which can be kept in a water-tight compartment by itself. It is an aspect of life. As has been well said, its sphere is nearly conterminous with life itself. Therefore education of all subjects of national concern, is the one which most urgently needs the constant impact of intelligent public opinion. Withdrawn from the persistent influences of individual criticism, it tends to become dry and mechanical and detached from the needs of life. It needs to be swept by the wind of popular judgment, to stand open to public knowledge, to be

regarded by the village, the town, the county, the nation, as in each of its different grades an affair of public moment, and, when healthily effective, a just cause of national pride. There is far more to be gained than lost by thus bringing public education within the scope of public opinion. But, then, education must be kept many-sided: its different grades and types will be found to be essentially necessary to its true efficiency in producing the different types of public and private excellence which a great nation requires. And the only way to produce a strong and united public opinion in favour of national education will be found to lie in welcoming frank and practical criticism on every existing form of education; in focussing such criticism, the replies which experience can make to it, in a form available for public guidance; and in recognising the fact that education is full of open questions; that its welfare must depend on variety of experiments; and that, if such experiments are to be made useful, their nature and outcome must be observed and recorded with scientific accuracy, and the results published to the world.

(4.) WHY IS REFORM NECESSARY?

Public interest in Secondary Education a sign of the times.

It is evident that questions of Educational Reform are among those which will urgently call for settlement in the early future. Almost against its will, and certainly contrary to its usual inclination, public opinion is finding itself compelled to face the problems of secondary and higher education. When we compare the columns of the newspapers at the present time with those of ten years ago, few changes are more significant than the increased importance which has come to be attached to educational matters. By a sure instinct the country has begun to realise that effective secondary schools are an indispensable factor in its moral and material welfare.

Reform is now within the range of practical politics.

One of the advantages of free institutions is that popular instincts of this kind enjoy opportunities for natural expression and indicate to statesmen the directions of national need. Nobody would expect the masses

in a democratic electorate to initiate discussion of the details of educational policy. Details are for Parliament and for the authorities appointed by Parliament for the administration of the law. But the instinctive trend of public opinion marks out the great questions which need consideration and those of our national institutions which call for amendment or reform. This is what has happened in regard to the provision of secondary education in this country. What the meteorologists would call a depression is already signalled in our educational atmosphere, and unsettled weather has begun.

The object of Reform is through the Schools to raise the national brain-level.

What, then, it behoves us to ask, is it that is wrong, and why must something be quickly done? Broadly speaking, our supply of efficient secondary schools has fallen below the standard of our time. The complexity of modern life has made it necessary for professional men, for the members of our public services, and for those engaged in trade and industry, to know more, if they are to attain success, than was requisite a generation ago. Energy, initiative, self-reliance, are no less needful, more needful, indeed, than ever; but, in the complex conditions which now prevail in all the higher grades of professional effort and of commercial competition, these vigorous qualities will not suffice alone. They enable a man to make effective use of

knowledge, but they are less than ever a substitute for knowledge. And the necessary foundation of knowledge is laid, most economically in point of time and effort, and most surely in point of acquisition, during the term of years spent in youth at an efficient secondary school. Men of exceptional strength and power of self-denial may perhaps make good in later years much of what they may have missed by the lack of a prolonged school-training, but they will be the first to feel the disadvantage under which they have laboured through missing systematic intellectual discipline during the years when the mind and character are naturally plastic and most capable of preparatory culture. Nor will any successful man's period of learning close with his school days. On the contrary, he will leave school with a full recognition of the fact that only then will his practical studies be about to begin. Yet nothing can really make up for the loss of a well-devised liberal education skilfully directed during youth or for the lack of the well-knit and firmly acquired general knowledge which it is the function of the Secondary School to give. On this foundation, and on this foundation only, can, in ordinary cases, professional knowledge, technical skill, and commercial sagacity be safely built up in later years.

Schools must be officially tested and recognised.

In order, therefore, that our secondary schools may provide these advantages

for the rising generation, it is incumbent on the nation to ensure their proper equipment, and by means of public tests and authoritative inspection to secure the efficiency of their work. We can no longer afford to leave so vital a part of the national defences unsupervised and uncontrolled. The foresight, the comprehensive organisation, and the highly skilled supervision by a responsible board of public control which have secured the efficiency of the Navy, are equally necessary, and for the same reasons, in the case of our secondary schools.

Efficient Schools are comparatively few and inaccessible.

Organisation is neither complete nor economical when it is left to accident and to the hazard of individual choice. The present system, or lack of system, may do well enough for parents who are both rich and wise. They can spare time to find out which schools are the best fitted for their children's future, and can afford to pay the high fees by which highly efficient private enterprise rightly recoups itself for risk and effort. But, under such conditions, families of small means are placed at a grave disadvantage in securing the best opportunities of education. And as the competition between individuals and between nations becomes keener, as the standard of average attainment and of necessary knowledge tends incessantly to rise, as the cost of the best education becomes inevitably greater in proportion

to the growing cost of educational equipment and the brisker demand for that somewhat rare commodity—great educational skill—the poorer classes of the community find themselves year by year at a relatively greater disadvantage, which, in the interests of the public welfare, should as far as possible be removed.

Education is the strongest line of Imperial defence.

Thus the instinct of the nation, so unmistakably shown in the public press, proves itself to be a true instinct and one which indicates the increasing urgency of reform in Secondary Schools. Our Empire within recent years has enormously increased. We shall need an increased supply of men of high character, vigorous initiative, and wide knowledge, in order to consolidate, develop, and retain it. The tendency in every branch of commerce and of manufacturing industry is in the direction of organisation on a great scale, in order that prompt and economical use may be made of scientific discovery and technical advance. Energy and knowledge are becoming more and more the indispensable equipment for commercial and industrial success.

International rivalry forbids national inaction.

Our neighbours and our competitors have already seen to it that their sons should enjoy better educational advantages. Wales has organised and Scotland is organising her Secondary Schools. America is throwing

itself into the work with characteristic energy. The modern Secondary Schools of Germany, Switzerland, and Scandinavia are already famous for their intellectual efficiency and for their accessibility to all classes. England lags behind. It has some of the best Secondary Schools in Europe, but also some of the worst. What needs to be done is, without injuring the best schools or curtailing the freedom and variety of efficient private effort, to raise the general level and to secure efficiency all round. Otherwise, England may find that she has been opening doors all over the world in order that other nations may enter in and profit by the new opportunities. The advance of our rivals has made our old-fashioned educational provision insufficient. As the Red Queen said to Alice in Wonderland, "in this country you have to run as hard as you can to keep in the same place."

(5.) SCHOOLS AS THEY ARE: SECONDARY AND OTHER[1]

(i.) GENERAL CONDITIONS.

By the EDITOR.

THE task of reforming Secondary Education is necessarily one of the most difficult of social problems in any State. It is doubly difficult in a country like our own, where it is desired to bring ancient traditions into closer harmony with modern needs. We are all agreed that in England we want more facilities for Secondary Education. The growing complexity of the duties of citizenship, the international struggle in commerce and industry, are forcing upon us the duty of providing the rising generation—boys and girls—with wider opportunities for obtaining in youth the intellectual training and the moral discipline furnished by a good system of Secondary Schools. The need for good Secondary Schools is, in many districts,

[1] *This Essay has already appeared in a pamphlet entitled, "Considerations Worth Weighing."*

urgent. Equally urgent, in other districts, is the need for maintaining the high standard of the schools which we already possess. Year by year the urgency grows. As a nation, we cannot afford to delay.

Definitions wanted in Secondary Education.

But, in order to supply our need, we must know clearly what it is that we ought to provide. What does "Secondary Education" mean? What is to be the aim of our Secondary Schools? What are they to teach? What shall we require as the irreducible minimum of a Secondary Education properly so called? How are we to test their work? These are questions which must be answered, and answered distinctly, before we can profitably act. Other nations have decided these questions. But, on these points, there has been in England too much vague generalisation, and too little precision of thought. If we were given to-morrow full powers to equip and maintain as many Secondary Schools as we pleased, it is to be feared that we should find ourselves unprepared to say exactly what we wanted to do. Yet, until our aim is clear and until we have defined the object of our enterprise, we cannot design the machinery which shall best produce what is wanted. Because we have not set ourselves as a nation to define our educational aims, much that we have done has been unsatisfactory though well meant.

Existing Institutions must be utilised.

For us in England, the difficulty of the problem is increased by the fact that, whatever we do, we must avail ourselves of a great number of existing institutions. We are not set to build upon an empty field. We have, as it were, to restore, adapt, and enlarge old buildings. Much of what we have is, by universal admission, extremely good. Much, on the other hand, is—by equally universal admission—scandalously bad. The wheat and the tares are intermixed. Not without much skilful and patient inquiry shall we be able to separate the good from the bad, the useful from the mischievous. In order to accomplish this initia task, we need competent and dispassionate investigation by inspectors independent alike of local influences and of sectional prejudice. Again, it is characteristic of English life that, in education, we lay at least as much stress on the ethical influences which form character, as on the intellectual disciplines which inform the mind. But we widely differ among ourselves—always have differed, and doubtless always shall differ—as to the form and content of that side of school teaching which conveys ethical influence. Hence in England, more than in many other countries, there will be need for great variety and tolerance in the provision of different sorts of Secondary Schools. In the wider sense of the word, the religious question would at once become serious

in English Secondary Education if any attempt were made to supersede the existing variety of provision by setting up one uniform type of teaching or of management, and giving it a monopoly of aid from local or central funds.

Various Types of School to be recognised.

During the last ten years the question of Secondary Education has steadily been coming to the front. At first there was a vague sense of the need for reform. The Technical Instruction Act of 1889 marked the national conviction that our industrial and commercial position was threatened by want of knowledge. But many of the far-sighted leaders of the Technical Instruction movement realised that the necessary basis for good technical instruction is a liberal Secondary Education. Hence, under the name of Technical Instruction, efforts were made for the improvement of Secondary Education also. Nine years of effort and investigation have thrown much light on the problem. We have realised, not only the interdependence of the different grades of education, but also the fact that, though interdependent, they are not coincident with one another. Primary, Higher Primary, Secondary, Technical, and University Education are closely linked each with its neighbours, but each of these grades of education has its specific aim. Besides those enumerated above, another type of education is slowly becoming important, viz. that

general training — partly scientific and partly literary—which is being increasingly provided in Evening Classes, in Polytechnics, and similar institutions, for persons who are engaged in offices or workshops during the daytime. This type of education, as distinct alike from Technical or University Education, we may call the education of adult citizens. Such Continuative Education, however, though useful and necessary, can never be a substitute for the efficient training given during the years of school life. It is a supplement to Secondary Education, not an alternative to it.

Unity of National Education.

National Education forms a great whole. But it is made up of component parts. And, in order that the interests of each part may be duly considered, we need to distinguish clearly the aim of each grade. The unity of National Education will be secured by the recognition of necessary differences in educational aim, not by attempts to obliterate them. The experience of the last few years, aided by the efforts of the local authorities, may enable us now to make the necessary distinctions.

(5.) SECONDARY AND OTHER SCHOOLS

(ii.) ACCORDING TO RECENT STATISTICS.

By H. BENDALL, M.A., *Secretary to the Joint Scholarships Board.*

The Return of "Secondary and other Schools."

THE first attempt to consider as a whole the existing means of supplying Secondary Education in England was the Return issued by the Education Department in 1898. This Return did not profess to be either exhaustive or exclusive; it offered no definition of Secondary Education, and the Department had no means of compelling the Schools to which application was made to afford the data which it sought to collect. On the one hand, public Elementary Schools and Technical Institutes were expressly excepted from consideration, as also, on the other hand, were students at Universities and University Colleges, but very few of the schools refused the desired information. The very words in the title of the Return—"Secondary and Other Schools"—may, however, be taken to indicate the

general and tentative nature of the inquiry made even within the prescribed limits.

It must be borne in mind that even the word "Elementary," as applied to education in England at least, has no very accurate signification. From the administrative point of view, the term "Elementary School" is used only of those schools in which the pupils' fee does not exceed ninepence per week, and is not applied to more expensive schools, though the principal part of the education which they give, may, in the popular sense of the word, be elementary. Hence we find in the Return of "Secondary and Other Schools" a considerable number of schools which are rather of a preparatory type than strictly secondary. On the other hand, no account is there taken of those "Schools of Science" which are worked in connection with public elementary schools, despite the secondary nature of some of the work carried on in them.

Small proportion of the population attending Secondary Schools.

The Report of the Royal Commission on Secondary Education had, in some way, prepared the public mind for the results contained in the Return, but nevertheless it came upon the public as somewhat of a shock to find that at the "Secondary and other" schools, if the boys and girls were taken together, the numbers would amount to no more than one per cent. of the population (taken as twenty-nine millions), although

it included children under twelve years of age, and although these formed forty per cent. of the whole number concerned. Again, the boys and girls over sixteen years of age taken together proved to be less than thirty thousand (or about one per thousand of population), and amongst these the girls slightly predominated.

How large a population of the scholars could fairly be said to be attending Secondary Schools, and how many were attending "other" schools, it was, of course, impossible to determine, because there is no definition of "Secondary School." But it is doubtful whether the greater part of the forty per cent. of young scholars alluded to above are to be considered as receiving Secondary Education properly so-called. In connection with the question of preparation for Secondary Schools, it may be remarked that in large Secondary Schools for boys in great cities there is, in many instances, a considerable and an increasing proportion of pupils who have received their preliminary education in public elementary schools, but this is not equally the case with regard either to boarding schools or to girls' schools in general.

Boarding Schools.

As regards boarders, it appears that more than one-third of the boys concerned, but only about one-seventh of the girls, were found in boarding schools. The influence of climate upon boarding schools is very marked. Kent, for instance, had

over four thousand boy boarders (nearly two-thirds in private schools); and Sussex had more than three thousand, as against ninety-eight in Northumberland, and only two thousand in all Yorkshire. Other causes, no doubt, may be at work, such as, for instance, a deficiency of suitable schools in localities nearer home, but the contrast is so striking as to deserve notice.

Another point as regards the distribution of pupils is of special importance, namely, the irregular distribution of endowments. Certain areas, or even counties, are much better provided in this respect than others, and consequently this wealth of endowments tends to raise in certain districts the proportion of population attending Secondary Schools. And not only the endowments themselves are irregularly distributed, but the amounts of the endowments concerned vary immensely. This is true with regard both to boys' and to girls' schools, but the deficiency in the supply of endowed Secondary Schools for girls is very marked.

Girls' Schools.

A generation ago the Taunton Commission found only a dozen such schools for girls in all England, and very few "Subscribers' or Companies' Schools"; and though in 1897 there were already eighty-six endowed schools and two hundred "Subscribers' or Companies'" Schools, the tables of the Return show that many wide areas are even

yet totally unprovided with schools administered by any kind of public, as contrasted with private managers. As in the case of boys' schools, the public or quasi-public schools for girls are on the average much larger than the private schools. Twenty-six administrative counties show not a single endowed school available for girls; and though it can no longer be said, as it was said in 1867, that there were a hundred towns, each with more than five thousand inhabitants, in which no endowed Grammar School for boys was found, it cannot be gainsaid that in very many districts the supply of aided schools is still very far from being sufficient.

Teaching Staffs.

Besides these data which concern the administration of the school, the ages of the pupils in attendance, and their distribution over the country, another very important matter is dealt with—the nature of the teaching staff as regards graduation, or, in the case of women, the virtual equivalent of graduation, namely, the qualification of having passed examinations which in the case of men students would have qualified them for a University Degree. The first thing that strikes the eye is the very large proportion of teachers to taught, especially amongst girls. The 158,000 boys (the total number mentioned in the tables) were taught by 8500 full-time teachers, but the 133,000 girls were taught by upwards of 12,000 teachers. In

boys' schools again the graduate element preponderated slightly over the non-graduate element, whereas, though in girls' schools the quasi-graduate element has risen to 1500, it was outnumbered by more than six to one by women who might be described as non-graduates.

Moreover, as no authority is in existence which has had the power to preside over the distribution of schools, so also, within the schools themselves, it has been nobody's business to set up for teachers any particular standard in point of learning, or to apply any kind of test of such attainments, or of skill in teaching. No kind of public test is, in fact, applied either to the teachers or to the taught, or even to the mere externals, such as the extent or sanitation of the premises in which the school is conducted.

But although the information which we glean is naturally of a limited kind, the Return has at least served to show to an extent which has not been appreciated by the general public, that both from the external point of view the supply of efficient schools is in many cases wanting, and also that within the schools the means of efficiently supplying education — the staff, the furniture, and appliances — likewise are wanting; and furthermore, to demonstrate the present need for an inquiry into existing institutions which may or should be pressed into the service of the public for the purposes of Secondary Education.

(6.) SECONDARY EDUCATION AND THE INTERESTS OF THE EMPIRE

DURING the sixty years of the Queen's reign the British Empire has increased in area by nearly three million square miles, and in population by nearly two hundred and thirty millions. These little islands, with less than forty million inhabitants, now hold in their hands the tremendous responsibility of the lives and prosperity and good government of some four hundred millions of human souls in every part of the globe.

The Nation's responsibility.

What, then, as a nation, are we doing for this great and ever greater duty of high responsibility for our imperial realms? We cannot blind ourselves to the fact that the simple and direct methods which sufficed in the 'thirties will not serve to maintain in peace and order so vast an Empire, much less to afford to its myriad peoples those opportunities of progress and development which alone justify the vast extension of our imperial

rule, and save it from becoming merely the shameless expression of the ruthless efforts of selfishness and greed.

A higher ideal of Education wanted.

A higher standard of insight, of analytic faculties, of imagination and of sympathy is needed nowadays if we are to comprehend aright the rapidly increasing complexity of movements which results from an ever-expanding area of civilisation. Empire, like wealth, brings its own responsibilities, which increase in complexity and intricacy with every new step of increase. How great is this intricacy it is hard for an outsider to realise or remember. The omission or retention of a few words in an American Tariff Act may save or may ruin the industries of peoples as far apart as China and Lancashire and Melbourne. A South African Immigration Act may shake the prosperity of lands as apparently unconnected as India and Germany. Deficient information in Downing Street may involve at the same moment an irrevocable loss of opportunities for trade development and of openings for the promotion of civilisation in regions as remote from each other as Hawaii and the Philippines. The acquisition of a good harbour, say, in the Antilles, may affect our friendly relations with powers as diverse as the Mikado and the Czar. Indeed, it is not too much to say that nowadays the inter-relation of different

parts of the world is so closely intricate that every working-man in England cannot but affect by his vote, and every Cabinet Minister by his speeches or his actions, the future welfare of many peoples whose very name he knows not and whose interests he may wholly ignore.

Increase of influence means increase of responsibility.

Surely, then, it is high time for us as a nation to see that the undertaking of such responsibilities is not left to chance, and to provide for the supply of men whose education shall have fitted and trained them to the highest pitch for the consideration of problems so complex and for the fulfilment of duties so varied. Nothing short of an ever-growing and constantly improving scheme of higher education will satisfy the needs which have arisen, and must continue to arise, for a sound policy and effective administration throughout the Empire.

What, then, are the points in which our national provision of Secondary Education needs improvement in order to suffice for the ever-increasing requirements of this "the greatest Empire the world has ever seen"?

(1) First and foremost may perhaps be placed the urgent need of improved provision in *all* our Secondary Schools for the proper teaching of modern languages. Nowadays, when the developments of public opinion are often a more potent factor in politics than the views of even the

greatest of individual statesmen, a man can pretend to no true sense of political responsibility if he be unable to read with ease the opinions of Continental peoples on current events. This need is obvious for every man, whatever his profession, who seeks to play his part as a citizen of the British Empire in using his vote wisely, and contributing to national and local opinion effectively, on all matters of imperial and foreign politics. For these reasons, and many others even more obvious, it is clear that our imperial duties absolutely require an immense reform in the teaching and learning of foreign languages.

(2) In the next place, it is clear that the increasing complexity of every problem of imperial politics—whether in our great protectorates in Africa, our spheres of influence in Asia, our subject peoples in India, our colonial brethren in Oceania, or our loyal daughter in Canada—must demand a supply of men highly educated in the science of politics, and highly trained for the expert analysis of sociological and economic problems, exceeding anything of the kind that our great schools have ever required to produce in previous days.

Science is everywhere—exact knowledge, prolonged research, and elaborate reasoning are essential elements in the solution of every national and imperial problem—and all this means an imperative need for highly trained and carefully

educated experts, in each and every branch of imperial politics.

No longer, then, can we dare, as a nation, to leave the supply of this great body of civilian experts to the chance success of our public schools, or to the haphazard and varying efficiency of private effort. If the nation is to be secured a due provision of men capable of maintaining the mighty interests of this vast Empire, then on the nation's shoulders must be the responsibility of ensuring the effectiveness of all our educational supply, and specially of instituting and maintaining a continuous State supervision and State guarantee of everything that pretends to the name and title of an efficient Secondary School. And this we have hitherto, as a nation, failed to secure.

(3) And if for civil life we need better directed training to develop our vigour in proportion to our ever-increasing imperial strain, surely our military and naval services, whose standard rises in like proportion, will need it no less. British pluck, British endurance, and British common sense may be as great now as in the days of Drake or of Nelson, of Marlborough or of Wellington. But these alone will no longer suffice to safeguard the Empire.

Science and highly trained skill play an ever greater part in the things of war, as they do in the arts of peace. And if the need be already admitted of a great improvement in our Secondary

Education in the interests of Industry and Commerce, a corresponding improvement must surely still more be admitted as necessary in our National Education for the purposes of War and Defence. For our Secondary Schools must always be the *basis* of all higher naval and military education, and in our Secondary Schools, therefore, must all such improvement first begin.

(4) Again, if the ruling body is to be sound, it must constantly be recruited with fresh blood and revivified with the best brains and the best talents from every grade of the body politic. In this way alone will the grave dangers of a narrow exclusive domination of a favoured few be avoided, and the best traditions of English Imperialism be kept sound and sweet. "La carrière ouverte aux talents" must be our motto in good earnest. There must be the means of sound and efficient Secondary Education within the reach of every lad of unusual ability whom Dame Nature may throw up, as it were in sport, from even the most unlikely and unpromising surroundings.

(5) Above all, there must ever be borne in mind, by all who would serve our Empire's needs, the highest and noblest function of every Secondary School that is worthy of England's glorious destiny —the function which consists in the development of that British character of manliness and fairness and the training of that high standard of public duty and of unselfishness, which make the name

of Englishman and the rule of England, in the furthest corners of the earth, a synonym for that Justice, Mercy, and Truth, which are alone the justification of our Empire's greatness and the final sanction of our imperial sway.

(7.) THE NATIONAL ASPECT OF THE REFORM OF SECONDARY EDUCATION

By the EDITOR.

1. Secondary Schools and Public Finance.

BESIDES its Public Elementary and its Technical Schools England possesses Public Secondary Schools of two kinds—

(i.) Middle Secondary Schools, in which the leaving-age is sixteen or seventeen years.

(ii.) Higher Secondary Schools, in which the leaving-age is eighteen or nineteen years.

Public Elementary Schools are supported both by Parliamentary Grants and by Rates; Technical Schools are supported by Local Grants and in a few cases by Rates; but Secondary Schools, though some of them already receive State aid in the form of grants from the Science and Art Department, have not yet been recognised as part of a national system, and no general scheme has been formulated for their supply, or even for their maintenance, where they exist. From the standpoint of public finance, the Public Secondary School differs from the Public Elementary and from

the Technical School as regards the proportion of School expenditure to be met from public funds. In the case of Secondary Education public opinion has not, in fact, yet made up its mind as to the proportion which the parent should reasonably contribute towards the cost of the education of his child. In Elementary Education the fee grant has quite recently relieved the parent from any such contribution: in the Technical School the contribution is comparatively light, owing largely to the liberal aid provided under the Customs and Excise Act. In Secondary Education, on the other hand, neither State nor Local Authority has determined what are the proportions of the total cost of education which the parent may reasonably be expected to defray. This total cost will, no doubt, vary considerably according to various local needs, and to the kind of education required: and further, the proportion to be contributed by the parent may vary according to the type of school.

2. Efficiency of Secondary Education dependent on Finance.

The whole problem of efficiency in Secondary Education turns upon Finance, and its finance has not hitherto received anything like adequate attention. For instance, the gross expenditure per head of pupils in a School must be ascertained and borne in mind before it is possible to apportion the burdens to be borne respectively by the State, by the locality, by the Endowment (if any), and by the parent.

In the Higher Secondary Schools, which include the great Public Schools, and in which the cost of tuition is somewhat obscured by the expenditure on Board, little aid should be claimed from the State, and still less from the locality; in such Schools the parents' contribution will be proportionately large. In fact, these Schools, though mostly aided by endowment, find their main support in the high fees paid by the parent.

The Middle Secondary Schools, in an increasing number of cases, derive aid in varying degrees from Science and Art Grants and from grants made by local authorities, but on the whole these Schools are maintained (rather than supported) by endowment and by fees. The income from endowment, being based generally on a decreasing income from agricultural land, is often miserably inadequate. The fees also are necessarily small, both because of the parents' circumstances, and also because of the regulations prescribed by the Charity Commission, which fix the maximum fee to be charged in each case. This maximum seems too often to have been fixed without due regard either to the income from endowment, or to the cost of efficient education, but to have been based on an imaginary estimate of the fee which residents in the district would be likely to pay.

3. Funds too often inadequate in Local Secondary Schools.

The result is, as might be expected, that these Middle Schools are at

every turn checked and hampered in their work, and that the results achieved by them, whether compared with those of similar Schools in foreign countries, or with those of the great Public Schools, are below the standard that ought to be reached.

This criticism, which applies to the great majority of our Middle Secondary Schools, is specially applicable to those that are essentially *local*, and cannot increase their income by attracting boarders from a distance.

4. Value of Public School Tradition in England.

What might and ought to be done in England in the matter of local Secondary Schools in the suburbs or residential parts of every great centre of population may be inferred from the position gained by some few Schools — such as St. Paul's, Birmingham, and Bedford—where income from endowment and fees combined is adequate. Such a position cannot be won without considerable expenditure, since not only must the buildings be good, the equipment satisfactory, and the staff sufficiently large and duly qualified, but means have also to be provided for developing, by school games and corporate school life, that public-spirit which must exist in our local Day Schools if they are to realise, on any effective scale, the English tradition of education that obtains in the great Public Schools. This tradition aims at, and largely succeeds in, training all the powers of the individual, and the

Schools in which it is cherished are specially rich in those influences which make for strength of character. This is the English ideal as opposed to the Continental practice of placing first those intellectual qualifications which lend themselves more readily to regulation and testing by the State.

The present time is exceedingly favourable for the extension to the local Secondary Schools of the influences which have made our Public Schools the best Schools in the world. These latter Schools, it is understood, have declared individually to the Lord President that they have no wish for separate or privileged legislation. At this time they are willing to assume their natural position at the head of a national system which, by their example, sympathy, and co-operation, they can undoubtedly largely influence for good. In effect these Schools provide for the needs of the Empire, they educate the administrators and civil servants, and for the professions; but they do not to any great extent provide—as the local Secondary Schools did in the past, and should in the future, provide—for local and municipal needs—the merchants and tradesmen, the directors of labour, the leaders in municipal life.

5. Improved Local Secondary Schools would lead to improved Local Administration.

As the importance of local authorities grows—and such growth is inevitable in a country of

representative institutions—the need increases of providing for the education *on a high plane* of these sections of the community.

The difference noted by Matthew Arnold, in 1866, between the intellectual outcome of National Education in England, as compared with that in Germany, is still true, viz. that "on the Continent the middle class in general, may be said to be brought up *on the first plane,* while in England it is brought up *on the second plane;*" and although the intellectual is only one aspect of education, and that not the most important, yet this aspect cannot be neglected without serious danger to the country. Indeed, it is now a national question with regard to many local Secondary Schools, whether they shall be allowed to sink to the lower educational plane of the Elementary School, or shall once more be raised towards the intellectual plane of the Higher Secondary School. As things stand, the low fees charged in what are called Higher Grade Elementary Schools, and the general ignorance of the public as to the criterion of value in education, tend to depress the competing fees of the local Secondary Schools below the minimum necessary for efficiency; hence the general educational level of such schools tends to sink rather than to rise, and is likely so to continue till, by inspection, these tendencies are exposed, and their results are recognised, and till public interest in Education is stirred by some statesman, or public

man, who recognises the absolute importance to the nation of the provision of efficient Schools of an appropriate standard *for all sections of the body politic.*

6. The Nation suffers from lack of system in Education.

Meanwhile, want of efficiency in local Secondary Schools—due partly to the absence of public aid and public interest, and partly to the general ignorance of educational matters, which is at once a cause and the natural result of the present chaos in educational organisation—leads to the following national disadvantages:—

(i.) There is no proper connection between local Elementary and local Secondary Schools. In consequence, two sets of schools at different fees frequently endeavour to do the same, or similar things; the friends of education, few at any time, are found in opposing camps; local jealousies are inflamed; the aims of schools and of authorities are confused to the detriment of all grades of Education alike. This means waste of money and of energy, it causes misunderstandings, and results in a comparative loss to the country of that promotion from school to school of able children which is of first importance to the nation as well as to the individual.

(ii.) The Technical Institutes have to begin their work at a much lower level than those on the Continent, and, as a consequence, England's chance

of success in this important direction is, compared with that of our Continental rivals, deplorably and unnecessarily small.

(iii.) The passage from the local Secondary Schools upwards is less open than it ought to be, and many promising scholars who would well repay a training at Oxford or Cambridge, are prevented from going thither, because their Schools are unable to provide Exhibitions for them, Exhibitions such as many of the great Public Schools offer to their pupils in lavish abundance.

(iv.) Further, the Universities have to deal with much work of a lower level than is desirable, or would be necessary, if the average attainment in Secondary Schools generally, local and non-local alike, were raised through the action of a better-informed public opinion based on the results of official inspection, and by consequent adequate provision for the educational needs of the local Schools.

(v.) The classes which are educated at local Secondary Schools lack public spirit in local matters, and in business too often take a narrow and unenlightened outlook. Our trade rivals have learned the value of a good all-round education in sharpening the faculties and turning them to the best account in the service of commerce. The "Open Door" is of little value without the Open Mind, and that cannot on any sufficient scale be made available for the nation until the State

undertakes the supervision of and more responsibility for Secondary Education, and until an economic and statesmanlike plan is adopted under which *all* existing efficient Secondary Schools, private and proprietary as well as public, are recognised in a national system which aims finally at providing—what is now lacking in England, though it exists in other countries—an adequate supply of Secondary Schools maintained in efficiency at such reasonable fees as may bring them within the reach of all sections of the community.

(8.) SECONDARY EDUCATION AND CITIZENSHIP

(i.) *By the* REV. CANON S. A. BARNETT, *Warden of Toynbee Hall, Whitechapel.*

"VESTRYDOM" and "Bumbledom" are often used as terms of reproach. No one likes to be told that he takes a "vestryman's" view of politics, or that he administers his affairs in the spirit of "Bumble." And yet there is no position more honourable and no work more important than that which is involved in local government.

Importance of Local Government.

The Vestry, the Board, or the Council has to a large extent in its hands the making or marring of the lives of the citizens whose votes will decide the destinies of the Nation and of the Empire. On its knowledge and activity depend in great measure the health and prosperity of the community. If its members are enlightened, there will be an expenditure which will increase the common resources, develop the richest and least developed of all the national estates, the bodies, the brains, and the tastes of the

people, and spread the means and capacity of enjoyment among the community. A local authority is a great power at the present day, and a growing power, for good or for evil. It has inherited many of the duties which in old days belonged to the Church, and it is every year assuming more and more of the functions originally undertaken by private enterprise, or not hitherto undertaken for the public good. It can lay down the lines of elementary education, drive out dirt and disease, build houses, establish hospitals, relieve the poor, lay out open spaces, provide libraries, secure order and beauty, make life healthy and happy.

Its ill-repute and the cause.

And yet, with all this power in their control, the name of vestryman, of guardian, of alderman, of councillor, too often suggests something insignificant and narrow, and may even constitute a reproach. The fact is, that the type of man who has so frequently given to a local authority its character (especially in smaller places), is a man of narrow mind and sympathies and of ill-educated intelligence. He has brought to the work many and valuable qualities, an aptitude for routine, the habit of being punctual, and a regard for detail which, after all that is possible has been said against municipal and vestry politics, have made those bodies serious and methodical factors in national life. But a man of this restricted type can never raise local authorities to their full

possibilities; he again and again misses opportunities for wise expenditure; from want of knowledge, he clings on to old methods, and, with a sort of dull tenacity, refuses to let go ways and things approved by his grandfathers; for want of elasticity of mind, he fails to grasp the distant as well as the near, the foreign as well as the native; he is not able to imagine a future with which to fit the present, or to introduce into England, with the needful modifications, methods approved on the Continent. He, in a word, is one of the evidences of the need of a wider system of Secondary Education. He has the public spirit, he has the power of drudgery, which are essential to good citizenship, but he has made his name a byword for want of that which good Secondary Education alone could supply. There are brilliant exceptions, but the "vestryman" or the "alderman" too frequently lacks the elasticity of mind which comes to those who, in a good school, become familiar with foreign languages, with the masterpieces of literature, with history, with economics, and with the principles of science, as he lacks the manners which are born in the republic of a school, with its traditions of honour, courtesy, and restraint under injustice. A local authority too often wastes public money and misses great opportunities from lack of knowledge; too often it is futile in action and unmannerly in debate from lack of training. Far more seldom would this be the case if the members had had

the benefit of a good and thorough Secondary Education.

Secondary Education will remove the cause.

It is, therefore, a citizen's concern to see that more secondary schools are provided. There are some good schools, and their work proves what is possible. But such schools are rare, and have no marks on the outside by which they may be unmistakably distinguished by the ordinary parent from outside. The chances are that the parent who aspires that his children should know more than can be learnt at an elementary school is attracted by some flashy advertisement or by the impossible promises of a prospectus. What is needed is a system of secondary schools as complete and obvious as that of our elementary schools. Such schools must be brought within reach of every parent, and there must be some recognised marks or public guarantee by which he may know them to be good. The parents who have the ambition that their children may go on till the age of sixteen years have as much right to be assured of this provision as those for whom elementary schools have been provided.

Secondary Education the concern of the Community.

But the strongest argument is not founded on the rights of individuals; it is the need of the community which requires that those on whom its government must largely fall shall be efficiently educated for that work.

The level of local government must be raised if the sense of citizenship is to be developed. It is not, therefore, only those parents who are ambitious for something higher for their own children who should join in pressing the Government to undertake the organisation of Secondary Education. It is every one's concern. The workman who cannot, because he is so much at his employer's command, hope to be a regular attendant at meetings, the man of leisure whose dinner-hour and engagements interfere with public duty, are alike concerned that the community in which they live be united and well governed.

The common value of Citizenship.

All classes would be better off if all alike were proud of the place in which they lived, and if the money they contributed were well spent. There is a motive power in honest civic pride. They who feel themselves "citizens of no mean city" are impelled upwards and prevented from going downwards. And, besides this honest pride, there is material gain when the local authority prevents disease, and spreads health and comfort and recreation at the smallest charge to the rates. Citizenship and Education go together. Those who grumble at things as they are are those who see what they ought to be; but grumbling is not enough: let them agitate for an improved and widened Secondary Education. It is the foundation on which to build the future.

(8.) SECONDARY EDUCATION AND THE DUTIES OF A CITIZEN

(ii.) *By the* REV. T. B. STRONG, B.D.,
Student and Senior Censor of Christ Church, Oxford.

SECONDARY EDUCATION aims not merely at teaching a person the ordinary duties which his trade or profession requires, but also at making him generally more fit to play his part in the complicated machinery of modern social life. It will give him wider views, more varied interests, and greater flexibility in action than he can possibly get in any other way. In the present age a change has come over English life, which has tended to bring into connexion elements which were formerly entirely distinct. The life of individuals has, in a sense, become more *public* than it was. Before, men lived apart more than is possible now, they followed their business, and disappeared into private life; their private pursuits and remoter interests were not in any definite connexion with the life of the State. Now, every one is required to make his contribution to the general life of the whole nation. In spite of

division of classes, which some say is accentuated in modern times, we live more as a nation, and less as a horde of independent individuals or households than was the case formerly. The *whole* of a man's life matters now to the State as a whole: and is felt to do so. And so it is that a type of education is being demanded that aims at developing the whole character, and not merely at technical or other limited proficiency. A man is expected to be not merely a good business man, or an honest plodding public servant, or a steady party voter, he is expected to make his influence and character tell to the utmost throughout his environment. As the trainer in a boat-race tries to make each man in his crew do his full work, and to avoid "carrying any passengers," so it is in the State. The State does not wish to "carry any passengers;" it wants each man to have his full influence and force: and therefore it must educate him not merely to perform mechanically a narrow task, but to fulfil the complete duties of a good citizen. It is proposed in the present article to illustrate this general truth in certain special regions of the life of a citizen under modern conditions.

1. Commerce. It is probably most difficult to see the advantages of higher education in the matter of commerce. The great commercial superiority of England has been won in a period in which the general level

of education was low. Moreover, many persons who have succeeded in winning enormous fortunes, have been scarcely at the educational level of ordinary elementary schools. Hence, there is a very widespread impression that education is unnecessary to commercial life. There could not be a greater mistake. One of the most perilous elements in the commercial rivalry of foreigners, especially Germans, is their superior level of education. And this means, not that they are better trained in the technical skill and knowledge required for the trades which they follow, but that their higher education is better and more effectual. Because they know more, they are more ready to adapt themselves to new circumstances: they understand better what is, and what is not, of vital importance, as they have a clearer sense of the proportion of things: they are less likely to be bound down within the limits of a narrow groove, because they know more of the world and of what it contains. The time was, perhaps, when the thing most necessary for commercial success was steady, unswerving application to one end. This is, doubtless, necessary still; but more is wanted now than this. Trade is not now a process of exchange, performed simply in one place; it ranges all over the world, and touches every variety of interest; and the man who has no sense of these things is left behind in it. He knows little of the world, he has been taught to do certain

things and repeat certain actions traditionally. He does not understand why; he acts because he has always so acted. Having no notion of the wider relations of his actions, he never knows when they are out of date, and so is passed by keener-sighted more flexible competitors.

2. Municipal Life. More even than in commerce, is the need for higher education felt in municipal life. Towns are now largely self-governing. On the town council is thrown the responsibility for their healthiness, their beauty, and their solvency. It rests with the members of the town councils, and therefore, ultimately with the citizens who delegate their functions to them, to insist on the proper observance of sanitary precautions, to preserve the history of the town as far as may be in its buildings, and to see that the municipality is not burdened with debt. A person who cares nothing for the beauty and history of his town—who is afraid to use compulsion upon the few for the benefit of the many, and who uses his position to advance his own trade, or that of some one else who has made it worth his while, is an unfit person to be entrusted with a town's welfare. And his fault is, in many cases, not that he is dishonest or careless, but simply that he is ignorant. He does not know the value of the things he neglects: he has learnt nothing of them; history and literature are a blank to him; he does not know what interests he is

destroying. Here and there municipal bodies have yielded to the persuasion of some powerful and enlightened mind, with the best possible results to their towns. But the appearance of such citizens is precarious, and no town ought to depend upon it for its policy. If the ordinary citizen were *educated*, that is, if he knew something about the great men who have lived in the place before him, if he had been led to feel that there is positive advantage in beauty, and that squalor is not a necessary incident of commercial prosperity, still more, if he had learnt the deep dishonesty of using public funds and sacrificing public interests for the good of some pushing individual tradesman or company, the future prospects of many of our towns would be brighter. As it is, in many cases, it may be a matter for congratulation to us of this age, that we shall not hear the criticisms passed upon us by the next.

3. The Empire. It is a long-standing charge against a democracy that it is incapable of governing an empire. The charge was brought by the great democrat Cleon, against his own Athenian people; it is echoed with some qualifications by Mr. Bryce, in his account of the American Commonwealth. It is a grave charge, if it be true, and one that Englishmen will do well to consider. For England is becoming daily more democratic, and there is no diminution in our imperial responsibilities

It must be remembered, of course, that the instinct of the English race for travel and adventure is in our favour in this respect, and that the continued growth of the population supplies a constant motive for emigration. But more is wanted than this. The reason why democracies have failed in the past, is that they have been, in this respect, ignorant democracies. The questions of foreign policy which were really vital to their existence, failed to attract attention. They had no sense of the importance and the responsibility of Empire. They knew nothing and therefore cared nothing of the places they governed; they knew only that there was money in an imperial position, since subject States pay tribute. They had never dreamed of the civilized man's *burden*—to make the whole world better for his civilization. They therefore acted on impulse, and without settled policy, or they left the whole matter to a set of professional politicians. It is higher education that will most definitely help to protect us against this lapse. The questions of foreign policy only seem remote when we know nothing about the larger life and history of our land. A small amount of real knowledge will enable us to see them in their true proportion, and judge of them without passion or prejudice. This is the most important of all features in political life; and it must be confessed that it is not very common. The lack of education shows itself more

conspicuously in narrow partisanship than in any other quality. The effects of a high education are nowhere so impressive, as in the dispassionate disagreements of cool-headed men. For we shall not all agree, even if we are all educated: but our disagreements will be reasonable, not merely the accidental outcome of the political organisation with which we happen to be connected. It is as ill-omened to entrust government to an uneducated people, as it would be to entrust it to an uneducated Foreign Secretary.

(9.) SECONDARY EDUCATION AND SELF-DEVELOPMENT

By the REV. T. B. STRONG, B.D.,
Student and Senior Censor of Christ Church, Oxford.

Leisure, as well as Work, a part of Life.

IT is sometimes forgotten, in the discussions upon education, that a man is not always working; that in every life, in some degree, there are tracts of time when the man is neither at work, nor at his meals, nor asleep. He cannot do nothing in such times. They must be filled, for good or for evil, with pursuits of some sort. And they are of the deepest importance for his whole character. While he is at work, the mind and will are more or less concentrated on what he is doing: he is under restraint. When he leaves off work, the restraint is removed, and the mind is left to its own resources. And it is then that it declares itself, as serious or frivolous, dull or intelligent, pure or unclean. There is, perhaps, no greater difference between men to be found than that which is displayed in the use they make of their leisure time.

Secondary Education aims at training men to use this leisure time well, no less than to do their work well, and thus its aim is :—

i. To awaken interests in Life.

It is obvious that it is increasingly important to make such provision in proportion as the conditions of work improve. Hours are gradually being shortened; more and longer holidays are expected and given, and the importance of leisure increases daily. And since leisure well spent is the best help to vigorous and hearty work: while leisure ill spent is simply another name for ruin, so it is important that men should have interests. Men take to gambling, drinking, and the like, not so much because they are wicked as because they are *bored.* They have time on their hands and do not know what to do with it; they are without interests. This is a serious misfortune. A man may be very well *educated* in one sense, that is, he may have complete command over the facts necessary for his life's work, but all this may be rendered entirely useless if he has no interests. To have an interest is to have a subject to which one naturally turns, which occupies the mind in otherwise vacant moments, and is pursued not under compulsion, but for choice. This is, of course, indispensable to any one who is to use his leisure well. And so it is the business of Secondary Education to arouse and guide men's *interests*, and thus help them to spend

such time profitably, for the advancement of real culture and high life.

ii. To train the mental activities.

But more may be said than this. Education of this sort aims not merely at killing time, but at developing certain definite powers which all men have in some degree. All men who have the ordinary faculties start with a desire to *know what is true*—to know what is *true as such*—not merely to know what will be profitable to them in business and the like. This desire in too many of us is stunted and starved. Narrow teaching and barren subjects have given too many of us a positive distaste for knowledge of all sorts, and it is probable that there is a kind of natural laziness which makes against the effort required to obtain real knowledge. The difficulties in education caused by the disposition to learn, provided only it can be done without serious trouble, are frequently neglected by educational theorists. But a better education will try to avoid these perils by awakening and training the natural desire for truth: by testing the powers and inclinations of individuals, and helping them to know what they are best fitted to learn really and fruitfully, instead of in a barren and superficial way. If a man finds himself drawn towards history a good method of education will teach him—not necessarily enormous masses of facts and dates, but the way of getting at historical reality: it will

try to teach him the incalculable value of any one firmly ascertained truth; "because one truth leads right to the world's end." If his tendency is towards science it will teach him—not necessarily endless lists of long Latin names of things he has never seen, but the difference between good and bad knowledge, between scientific and superficial information. It will try to make knowledge vivid and real, in a word—*interesting*.

iii. To stimulate the imaginative faculty.

Then, again, there are the powers of the imagination. Some men have more of this and some less, but probably all start with the possession of some. Literature and art train this power, because men get ideas, as the phrase is, by their means. And it is worth while to get ideas; for the greatest things in the world's history have been done under the influence of ideas. And ideas are transmissible from one age to another. They are registered in literature, in its various forms. Thus through the writings of great men, poets and historians and philosophers, we get an insight into their ideas which have proved so masterful; we get to know something of the way in which human life works. In like manner, through art, painting and sculpture, architecture and music, men extend the range of their minds; they gain freedom from the monotony of daily routine, and are filled with liberal and powerful thoughts. Art is not merely a luxury

and a decoration, it is the mode in which a particular temperament expresses its *ideas*. Great art has always great ideas at the root of it: and therefore it is worthy of the deepest and most elaborate study.

iv. To train the character through love of the truth.

To put this shortly, the education we want is that type of education that affects not only the mind but the character. We want men not only to know a certain list of things, but to gain a real love for truth, and that implies a fair and tolerant spirit. These are the things at which Secondary Education aims; these are the reasons why it is so vitally important to spread it. By itself it will not make men moral; for that we must look to some other force; but it will encourage and strengthen the character, as well as supply an occupation for leisure time.

The full value of Secondary Education not immediately discerned.

It does not necessarily imply a large list of subjects, or a prohibitive demand upon time. But it does demand a certain amount of venturesomeness and sacrifice. The people of England, if they are really to educate the next generation wisely, will have to go patiently to work. They will be bold enough to teach, and to have taught, what does not produce immediate result or express itself at once in money value. And this means something

of a sacrifice. But it will not be a sacrifice without purpose or result. It will affect men's work by means of their character. People will be found to be better in their own business, the more liberally their character is trained.

(10.) SECONDARY EDUCATION AND BRITISH TRADE

By GILBERT D. JENNINGS.

IT is an amazing thing that the greatest trading country known to history should possess no organised scheme of teaching young traders the science and art of trading.

It may be that past success in trade has made us careless. It may be that the art of trading (the practical side) is of so much more importance than the science of trading (the theoretical basis) that the opinion has unconsciously obtained that the trader can get no good from systematic teaching, but must *pick up* his business knowledge. Or, again, it may be that the genius of the Englishman sets so strongly and instinctively towards successful trading, that he does not need that careful training which neighbouring nations find necessary. Both these contentions are from time to time advanced, but none of them can be securely maintained.

True, we have been successful hitherto, but history has in its record declines and falls as

as rises, and we do not wish that the sun of our national commerce should set.

True, that trade is rather an art than a science —so, perhaps, is Surgery; yet we do not allow surgeons to *pick up* the knowledge of their profession.

True, that the Englishman is a trader by intuition—so is he a fighter by nature; yet the soldier seeks to perfect himself by the most careful teaching and training, else would he at a disadvantage meet the enemy in the gate.

General and special Training for Traders.

Our Chambers of Commerce first, and the trading world later, are awaking to the conviction that something must be done, and that promptly, if we are to maintain our commercial supremacy among the nations. Germany, France, Belgium, and Italy have long ere this accomplished what we are now attempting, and the commercial schools and colleges of these countries are ahead of us. The work that lies before us has been laid out with much force and detail by Sir Albert Rollit in a recent address to the Society of Arts (*Journal* for December, 1898). He treats first of the preparatory teaching, and secondly of the special training or technical training of the trader. It is with the former only that we are now concerned.

It will probably be found that the graduate in trade will require close study for a term of years of the principles of his *science* and constant practice

(under supervision) of his *art*—in fact, much the same training as the modern solicitor or accountant receives.

It concerns us now to ascertain how the suitable foundations may best be laid, of what the entrance examinations should consist, and how the boy should be prepared in his preliminary work by his schoolmaster.

Trade and the Secondary School.

It will usually—indeed, almost always—happen that his school will be a secondary school. Without disparaging the excellent work of the primary school, and without wishing to take from the capable scholar in such a school his chance of mounting the social ladder, it must be apparent that the leaders of trade, and it is of such we speak, will be supplied from the class that knows the secondary school and the secondary school alone.

How, then, may the curriculum of such a school be adapted to training the young trader? Some would advocate that his attention be exclusively given to the knowledge of which he will make actual practical use in his business—such as arithmetic, geography, and modern languages. Surely this would be false economy. A surgeon learns something more than anatomy and the use of instruments. The mind needs to be trained, as well as the memory stored, and no line of life—least of all that great profession which needs so large a

knowledge of men and things as Commerce—can dispense with general literary culture. Whether on the one side Latin, or on the other side Science, is the better mental exercise will doubtless be debated; but in the main the curriculum of a good secondary school represented and tested by the Local Examinations of Oxford and Cambridge, or the Matriculation Examination of the University of London, is found practically best to prepare the mind of the young trader for entrance into commercial life—with one or two provisos.

Utility and other studies.

The teacher needs to keep in view, even if the scholar does not, that some subjects will be of great practical use hereafter, and he must see that, whatever may happen to other studies, the knowledge acquired in these shall be so pegged and keyed into place that it shall be impossible to lose it. For instance, the boy destined to be a merchant may, if he please, learn the parallelogram of forces—it is useful knowledge, but if afterwards forgotten, no great harm is done. His grasp of arithmetic, however, must be strong and lasting, and his facility in French and German not merely such as to enable him to pass an examination, but such as to possess him once and for all with a key to the mind of men of those nations whom he may hereafter meet. He must write and speak these languages fluently. And his geography must not be a string of names

learnt by rote, but must be so tempered and quickened by general knowledge and common sense as to make it impossible for him to say of the monsoon, as did a certain man of Manchester, that it is a *periodical fair in China!* The schoolmaster is awake, let him stay awake, and keep in touch with the professors of all the professions into which his pupils will be drafted — with Chambers of Commerce as well as Universities. Then will he lay broad and deep the foundations of that trading knowledge which is power, and which, when acquired in England, shall make us little to dread the superior article now said to be made in Germany.

(II.) WORKING MEN AND SECONDARY EDUCATION

The evils caused by inefficiency in Secondary Education are ultimately felt in their greatest severity by the poorer classes.

PEOPLE sometimes say that it does not matter to working men whether our Secondary Schools are good or bad, and that, so long as the Public Elementary Schools are kept up to the mark, working men need not trouble themselves about the state of the Secondary Schools, on the ground that the latter are the concern of the well-to-do classes only. Those who hold this opinion labour under a great mistake. The working classes suffer in the end more than any other part of the community from the results of a defective system of secondary and higher education. Just as a bad system of taxation generally inflicts more injury on the poorer than on the richer classes of a nation, so are the poorer classes more injured than the richer by an ill-managed or defective supply of Secondary Schools. Abundant facilities for first-rate education have become essential to the welfare of a progressive nation. A country which is slack about its schools will certainly be worsted in the

modern struggle for existence. Every section of the community has thus a direct concern in the well-being of all its educational institutions from top to bottom. But, in the case of the neglect or mismanagement of a nation's Secondary Schools, it is on the poorer citizens that the brunt of the inevitable consequences will be felt most. If worst comes to worst, the well-to-do can make some sort of shift for themselves and for their children. The poor, on the other hand, are practically powerless to do so.

Working Men interested in the effective training (i.) of Public Servants, (ii.) of captains of industry, (iii.) of lads of promise.

There are three principal reasons why working men have much to gain from the reform of Secondary Education in England, and much to lose by indifference to its needs.

i. The well-being of Modern city life calls for trained intelligence and high principle in the Municipal Public Service.

First, because city life under modern conditions requires a degree of scientific administration about which our forefathers in their simpler circumstances had comparatively little need to trouble themselves. In the management of its water-supply, of its drainage system, and of its means of cheap and rapid communication, in the lighting of its streets and the housing of its poor, a modern city needs the skilled service of highly trained and high-principled officials. We all, and none more than

the poor, depend for much of our health and comfort on the brains and tone of our municipal civil service. To help in producing a constant and abundant supply of men, qualified by high character and liberal education for this branch of public service, is one of the chief tasks of our Secondary Schools. The need for the services of such men tends rapidly to increase with the increasing complexity of the problems of town life. Every branch of the municipal government of huge cities like London, Manchester, or Liverpool, has to be "mixed with brains." The same is proportionately true of smaller towns. To grapple with the problems of modern city administration is a task requiring a wide range of knowledge and trained intelligence and judgment, as well as broad sympathies and high principle. In the development of these qualities and aptitudes one of the most necessary agencies is the efficient Secondary School.

As the well-being and upright Government of the Empire as a whole calls for the same qualities in the Imperial Civil Service.

And the same is true, in even greater measure, of the government of the Empire itself. The rapid increase during recent years of the dominions under the British flag will necessitate a corresponding increase in the number of highly trained administrators competent to govern and develop them. It mainly devolves on our Secondary Schools to educate the youths who subsequently, after a period of further study

at a University, enter the Home, Indian, and Colonial Services.

ii. Trained intelligence needed in directing Trade and Industry.

In the next place, industry and commerce require in a constantly increasing degree the assistance of men possessing highly specialised knowledge of scientific processes and of trade conditions. Energy and enterprise, if uncombined with special knowledge, count for less to-day than they did when competition was not so keen. In business ventures on a large scale there is an ever-growing demand for the kind of knowledge which can improve or cheapen methods of manufacture and of distribution. Hence the need for the higher technical education which has already done so much for German and American industries. But it has been found that those higher kinds of technical education, which are most fruitful in their commercial and industrial results, cannot usefully be imparted except to those who have received an effective Secondary Education as a basis for applied studies. An efficient system of Secondary Schools is thus the indispensable foundation of an efficient system of technical schools. Therefore the prosperity of a trading and manufacturing nation, and the demand for labour within its borders, depend more and more on the energy and industry of its citizens being combined with the rudiments of liberal education given in good Secondary Schools

and with the specialised training subsequently given in well-equipped technical institutions. It should never be forgotten that on a nation's efficiency depends its material well-being; this efficiency is as much determined (or more) by the knowledge and ability of the organisers of industry as by the skill of the workers. Technical education is necessary for the latter, but a much wider and more prolonged education is necessary to fit a man to direct, plan, and organise an industry so as to make it profitable and successful in the competition of other countries. On the superior qualities of the officers the safety of the crew depends. If the captain be inadequately equipped for his work, the ship may be lost, however skilful and industrious the crew. In the industry and commerce of a nation, if those who must organise are less efficient than their rivals in other countries, its trade will inevitably decline, and parts of it pass unnecessarily into the hands of the rival nations. The welfare of the working classes is largely promoted by the efficiency of a nation's Secondary Schools. The latter can also do much to strengthen in individuals the moral principles on which the trading credit of a country in large measure rests, and to train the powers of sympathy and the desire for social justice which can do much to mitigate estrangements between class and class, and to induce a reasonable attitude in struggles between employers and employed.

iii. Secondary Schools give opportunity to the "Lad o' Pairts."

Furthermore, Secondary and Higher Education are becoming more and more the avenues to success in life. Ability is found in all ranks, but, in consequence of the rise in the standard of knowledge required for the practice of all professions and for responsible positions in commercial life, ability needs the advantage of systematic training in order to seize opportunities for its effective use. It is much to be desired that efficient Secondary Education should be brought within the reach of promising children of all classes, whether born in town or country. There is no class-monopoly in the control of industry; but, in order to get to the top of the tree, a clever boy needs, more than ever, to make use of the educational ladder.

Secondary Education not a Class distinction.

It is an advantage to the nation that true ability should be utilised wherever it crops up, and should have scope and opportunity for its employment with full effect; all classes profit by it, and none more than those with limited wages, since it is by the exercise of such talent that inventions have cheapened the necessaries of life and have opened up numerous new industries which find remunerative employment for large numbers of skilled workers. The reform and development of our English system of Secondary Education are

therefore matters which concern the whole nation. Scotland and Wales, Germany and Switzerland, Scandinavia and the United States have got the start of England. We cannot afford to lag behind in the race. Secondary Schools of high quality, conducted under the guarantees of public inspection, conveniently accessible in point of situation and by means of maintenance scholarships to boys and girls of real intellectual promise from all classes, are an essential part of the equipment of a modern State. A strong navy and good schools are indispensable lines in our national defence.

(12.) THE INTEREST OF THE RATEPAYER IN THE REFORM OF SECONDARY EDUCATION

By CLOUDESLEY BRERETON, M.A., L.-ÈS-L.

Economy the interest of the Ratepayer.

THERE is a somewhat widespread idea that the interest of the ratepayer consists mainly in keeping down rates. No doubt economy is all-important. But we must not forget there is none the less a point at which true economy ends and "penny wise and pound foolish" economy begins. What is this point? The answer lies in a true conception of what economy really is.

The Meaning of true Economy.

True economy does not mean mere saving, much less cheese-paring. The real meaning of "economy," as its derivation shows, is *management*—that management that first regards the objects on which money must be spent, and then, according to the pressingness of their needs, decides how much money must be devoted to them, if the work taken in hand is to be *efficient*. Such is the meaning of every budget, either

national or local. The Chancellor of the Exchequer or the local treasurer (be it borough or county) regards first of all what must be done, and then how much money must be set apart to do it. And he is but a poor Statesman, nay, an unworthy steward, towards his country or his locality who from false motives of parsimony cuts down his estimates below the level of *efficiency*.

The two principles that guide the National and the Local Treasurer.

But, it will be urged, the chancellor or local treasurer cannot do everything. The nation or local area would go bankrupt if it tried to carry out all reforms. This is perfectly true. The public financier has, therefore, two main principles to guide his decisions: (1) The imperative need of the work to be done; (2) the productiveness of the work when done. This is only another way of saying the nation must divide up its expenditure between insurance against risk (such as the outlay on army and navy, etc.), and investment (roads, harbours, etc.).

The unique claims of Education on National and Local funds.

Now, education stands in the unique position of being one of the best forms of insurance against the competing intelligence of other nations. An obvious example of the supreme worth of intelligence is the battle of Omdurman, which was not won by mere pluck, but by the brains that made the guns and directed

them. On the other hand, education, by reason of the increased efficiency it produces all round in the work of a nation, is the most productive of all expenditure. To put it shortly, it is a system of national insurance, whose bonus in the shape of increased efficiency largely outweighs the premiums paid. It is thus, in virtue of this double claim, among the very first objects that it is the duty of a chancellor or treasurer to provide for.

The paramount claims of Secondary Education.

There are, however, three forms of Education — Primary, Secondary, and University. Of these, Secondary, for the moment, stands most in need of public attention and assistance: (1) Because it is not in a thoroughly efficient state; (2) because the supply of it is inadequate in many areas. The remedies are central control, local authorities, and money. The question is, should the State find all the latter? We think not. The general tendency in educational finance of modern times, and especially of modern democracy, is to divide the burden between the taxpayer and the ratepayer, and to hand over the control of the money in a large degree to the latter: (1) Because the locality, in the natural order of things, is better able to administer the money from its intimate knowledge of the real wants of the district; (2) true economy —that is, true and efficient management—can only be secured when the locality directly feels that a

part of the money it is spending comes directly out of its own purse.

The return the Ratepayer in each district gets for his money.

The advantages that accrue to a district from a thoroughly efficient and adequate supply of Secondary Education are very real in every way. There is to-day an ever-increasing demand not for mere "book knowledge," but for more "trained intelligence." Every kind of business and profession in order to be successful requires more than ever to be "mixed with brains." This is equally true of all matters of public administration, whether national or local. Political and social problems are daily becoming more intricate, and demanding thereby more and more "brains" to unravel them and find the right answer. Trained intelligence on municipal councils or on county committees does not only lead to the borough or county funds being disbursed in the most profitable and efficient way, but also saves the ratepayers thousands in the end by preventing unnecessary expenditure and controlling waste. But we want even more than mere trained intelligence in our public officers, we want as well as much public spirit and high personal character as possible to prevent jobbery and to allow of questions being looked at as far as possible from the point of view of the community. Now, the best training for the intelligence a[illegible] character and for the fostering of public [illegible] come from a Secondary

School. It is obvious, therefore, that any district that is insufficiently supplied with these "nurseries" of public spirit and trained intelligence must be at a serious disadvantage in comparison with the others, through the standard of intellectual expectancy in the area being lower than need be, and that each ratepayer in the neglected area must individually be adversely affected by the general disadvantage under which his community suffers.

The interest each Class in a district possesses in an adequate and efficient system of Secondary Education.

(*a*) The interest of the Working Man.

But this question of sufficiency and efficiency in Secondary Education does not merely affect the whole community, it has also a direct bearing on the various classes of which it is composed. Perhaps the greatest sufferer of all from an inadequate and ineffective system of Secondary Education is the working man. Democracy requires that its leaders should be as enlightened as possible. The more educated they are (in the best sense) the better and more effective will be their leading. But there is another matter equally serious. Perhaps the most vital question for the State to-day is to organise the selection of the fittest and bring the ablest men to the top. This can only be done by making Education, and above all Secondary Education, accessible to all who can really profit by it, and especially in that case to the clever child of the working man.

(*b*) The interest of the Middle Classes.

Great, too, is the interest of the middle classes, especially the lower middle class, in having a good Secondary Education within reach. The small trader, the country doctor, the impoverished parson feel keenly the hardship of the present *régime* under which the sacrifices they are making for the education of the nation go almost entirely into the coffers of the School Board, with little or no direct return to themselves. Many of them cannot afford to send their sons to expensive boarding-schools. They, of all people, especially such of them as live in the country, deserve that an efficient Secondary day-school should be established in their neighbourhood, that their children may enjoy equal educational advantages with those of similar parents in the towns where Secondary Education is more abundant, though even there the supply is often inadequate.

(*c*) The interest of the Upper Classes.

In one way the upper classes have perhaps the greatest stake in the matter, for they of all have most to lose. As the well-being of the working man largely depends on the efficiency of his leader, so in turn the interests of the leader require that those under him, and especially his immediate subordinates, should be as enlightened and efficient as possible. But above all they must do their best to minimise

the great dangers that spring from popular ignorance. Democracy has received politically immense power, and this immense power can only be directed to right ends when the power of democracy is unceasingly fortified by knowledge. Great is the danger of that State in which only a small *élite* are well educated and instructed. In times of unrest they cannot exercise the control they ought, because they speak a language of which the crowd in its ignorance must necessarily fail to appreciate the arguments and importance. Safety can only come when democracy is organised throughout with no sharp-cut castes and classes, but a gradual subordination, by which truth and knowledge can filter down from the highest to the lowest. Such sacrifices as the upper classes may make towards increasing the efficiency and supply of Secondary Education are the best, nay, the only means of insuring themselves and the State against the dangers that national ignorance must assuredly provoke.

(13.) THE INTEREST OF GIRLS IN SECONDARY EDUCATION

(i.) *By* MISS MARY GURNEY, *Member of the Council of the Girls' Public Day School Company.*

THE Queen's reign has witnessed a revolution in the education of girls, and the change has been far greater in Secondary than in Primary education. Even fifty years ago girls were admitted to the Primary School practically on equal terms with boys, and have since been sharing in its increased advantages.

But public provision for the Secondary Education of English girls is of comparatively recent origin; and the complete change in general opinion on the subject is nowhere better shown than by the Report of the late Royal Commission on Secondary Education (on which women served for the first time), and by the action of the Charity Commissioners for Endowed Schools in restoring to the use of girls some educational endowments originally intended for them.

The Requiremen

Girls may now confidently claim a fair share of

interest in the future of Secondary Education. Much still remains to be done to continue the progress already made without direct Government aid, and attributable chiefly to five causes—

1. The movement in favour of the Higher Education of Women.

2. The vigour of a few large Proprietary Schools, such as Cheltenham Ladies' College, and the establishment of numerous Public High Schools for Girls.

3. The remodelled school schemes of the Charity Commission, which now in many cases include provision for girls.

4. The encouragement given to the setting up of an "educational ladder," by the award of County Scholarships under the Technical Instruction Acts.

5. The equal advantages given to women with men by the University Extension System.

The Report of the Royal Commission in 1895 fully acknowledged the value of the work in existing institutions, and, with regard to the future, advised proceeding in the respect of equality of advantages to boys and girls, and the first principle in the provision of Secondary Schools should be "to utilise every existing element of the supply which is good of its kind." That the members of the Commission were alive to the danger of a rigid uniformity may be gathered from the following passage:—

"Freedom, variety, elasticity, are, and have been, the merits which go far to redeem the defects in English education, and they must, at all hazards, be preserved. The 'system' which we desire to see introduced may rather be described as coherence—an organic relation between different authorities and different kinds of schools, which will enable each to work with due regard to the work to be done by the others, and will therewith avoid waste both of effort and of money;" but it seemed clear to the Commission that a preliminary inquiry into the state of existing schools was desirable.

Provision of Girls' Schools.

The following are typical instances of what such an inquiry would reveal in the matter of provision of Girls' Schools:—

Birmingham, with the King Edward's endowments, has its Central Girls' High School (also two independent High Schools), four Grammar Schools for Girls, with Scholarships in the School, and Leaving Scholarships for the University.

London is encircled by flourishing High Schools of the Girls' Public Day Schools Company, and has also Church High Schools, and the North London Collegiate, and the City of London Schools; with many Endowed Second Grade Schools in which numerous County Council Scholarships are held.

Other cities and towns can show similar provision,

though in many larger towns the provision of the lower Secondary Schools may prove defective, and in smaller towns First Grade Schools might be altogether wanting.

With regard to the quality of education given in most existing schools, it may be considered satisfactory, thanks to the direct and indirect influence of the Universities. The First Grade Schools are kept in close touch with them by means of the Examinations and Higher Certificates (taken also in the Boys' Schools of corresponding status) of the Oxford and Cambridge Joint Board, and by the sending on of many students to the Universities, although for this purpose there is still an insufficient number of Leaving Scholarships for girls. The Report of the Commission called attention to this fact, and put on record that "the need of more Scholarships to the Universities is much felt in Girls' Schools."

Standard of Work.

Both First and Second Grade Schools work up to the standard of the Oxford and Cambridge Local Examinations. The London University Matriculation and Intermediate B.A. Examinations are also of great service, and the London Degrees may be taken from Bedford, Holloway, and other colleges, whilst women are admitted on equal terms with men to all the Northern and to the Welsh Universities.

Education of a literary type has thus been placed

on a good footing by the rapid spread of schools, with the especial added advantage that the mistresses who teach have generally themselves benefited by University training, and that women occupy the highest teaching posts. This is in direct contrast to the state of Girls' High Schools in Germany, where all the upper teaching posts are held by men. Great attention has been paid in Secondary Schools to physical training, and to exercise and games; but it cannot yet be considered that scientific and manual training, as following out the plans begun in the Kindergarten and aiding the development of the child, have received equal attention. For these objects much increased space and apparatus are needed. Grants towards buildings and for science apparatus have been given liberally to some schools by County Councils, and increased aid is required.

Supplement, not supplant.

In order to promote the cause of Secondary Education for Girls, it is especially necessary to improve existing schools, but not to displace them, and every particle of tradition which has grown up around them should be preserved. The cost to the country would be far greater if a new system had to [illegible] created, whilst the valuable work of existin[illegible]ds, and still more the thoughtful labo[illegible]ing teachin[illegible] would be checked an[illegible]ed.

[illegible]onnecti[illegible]ary Schools with

the Elementary Schools is also an important matter in the future. As with boys, Scholarships for Girls should lead on clever children from the Elementary to the Second Grade and to the First Grade Schools. The change of school should not be too late in the pupil's career, owing to the difference of curricula, and the Scholarships should not be too numerous.

It is not advisable thus to transfer girls of mere average ability, lest complaints of over-pressure should arise from Primary and from Secondary Schools alike.

Work for a Central Authority.

Both for the planning out and for the subsequent inspection of work in Girls' Schools, the guidance and help of a strong central authority are wanted, and on this authority women ought to be represented. Such a central authority, comprising an Educational Council as an essential feature of its organisation, and working in judicious co-operation with wisely constituted and truly representative local authorities, will be best able to give guidance to the teachers, and to secure the efficiency of all types of Secondary Schools. One of its chief aims would doubtless be the maintenance of that connection between the Universities and the Secondary Schools for Girls which has done so much to bring about the improvement in girls' education in England. And one of the happiest results of the labours of such

a remodelled Education Office would be to secure due regard for principles based on educational experience in the planning of any further facilities for the better education of English girls.

(13.) THE INTEREST OF GIRLS IN THE REFORM OF SECONDARY EDUCATION

(ii.) *By* MISS TULLIS, *Principal of St. Catherine's, Holland Park, W.*

TWO points, although of vital importance to the interests of girls in Secondary Education, are perhaps too little emphasised: this is, however, not due to any doubt in the matter, but to the fact that they are fortunately now regarded as beyond the limits of controversy. First, that public interest in the education of girls has been so greatly quickened and extended during the last half-century, that any scheme of reform must be as favourable to girls as to boys before it will have a chance of general acceptance; and second, that so much and such good work has been done for the cause by women, that their presence will be required in every council and their influence looked for on every school time-table.

Wanted: an Ideal in Girls' School-Education.

But if the friends of girls' education would be in a position to take advantage of all the opportunities the next few years will present, they must be just as fully persuaded

as to various other matters. It is pretty certain that parents belonging to the classes most interested are less prepared to formulate demands on behalf of their girls than of their boys. The necessity for an improvement in the number, quality, and availability of schools is recognised, and experiments at home and abroad are to some extent observed and criticised; but the uncertainty as to the future of the individual girl—whether she is to lead the life of the home, or to swell the ranks of independent workers—seems to have its counterpart, if not its result, in doubt as to what should be the aim and means of school-training. And if parents are not yet clear in their demands, educationists, too, have hardly reached a point of agreement, for while ready to acknowledge the defects of the too exclusively intellectual character of the system most in vogue at present in Secondary Schools, they have various reasons for fearing change.

The Aim must be Symmetrical Development.

The doubts and hesitation of the parent do not properly apply to the early years of school-life. Each girl has to be trained first as a child—a human being whose happiness and usefulness through life will depend very lar[illegible] on the influences of this period. That t[illegible] not be any necessary antagonism betw[illegible] terests of gi[illegible] tined for home on [illegible] nd and fo[illegible] ns or business

on the other is evident, when it is considered of what they have a common need—physical training, both general and special; moral and religious training, tending to elevation of character, deeper insight, and wider outlook, and to the raising of our low level of national manners; and a curriculum wide enough to allow for the exercise of all the faculties and the discovery of all special aptitudes. It cannot be maintained that the home girl can safely do without the qualities and acquirements useful in business, or the working girl without culture, or either without a healthily-developed body and educated eyes, ears, fingers. Then, again, there is always a chance of the worker becoming a wife, and the home girl a worker, which is an argument for a common training until the age for specialisation arrives.

The fears of the teachers, happily of a passing generation, seem to be based on misconceptions, such as that the intellectual side of women being the weakest, to give any time to studies classed as non-intellectual would check mental development; or that girls generally should be prepared to compete with boys. If it is still necessary to combat such opinions, it must be argued as to the former that, even if it be admitted that a girl's intellect is not her strongest point, the reasoning is still faulty; for, on the contrary, these so-called non-intellectual studies help towards freshness and elasticity of mind and body, and make acquisition

easier. As for the latter, whatever the exceptional girl may have to do, the average girl should not be expected to compete with boys. It should be recognised that the time she gives to needlework, to music, to home duties, makes comparison with boys unfair, and that the different future awaiting her makes it unnecessary.

But there is, nevertheless, amongst parents, teachers, and the general public, a growing recognition of the fact that in order to obtain for and from girls the best of which they are severally capable, careful provision must be made for this all-round education; in other words, that the aim of the school must be symmetrical development.

The Means of Development.

There is no lack of means to this development—systems of physical exercise, games, singing, modelling, drawing, brushwork, painting, Sloyd, needlework, history, poetry, pictures, languages and their literatures, mathematics, science, are all ready for the choice and service of the skilled teacher—and no lack of time, if a judicious choice is made and subjects which demand an unusual amount of attention (such as Latin and mathematics beyond the elementary or trial stage) are dropped by girls with no natural aptitude for them.

The Discovery and Fostering of Talent.

All through this school period girls of conspicuous ability will be marked

out and a sufficient supply of Scholarships should be provided to prevent them from drifting away through lack of pecuniary means. These Scholarships should be tenable at the school, the University, the Training College, the Art or Craft School, or even abroad, according to the needs of the winner. This provision, although a difficulty, would surely be a decreasing difficulty as public interest spreads.

The Period of Specialisation.

To pass from this period of general training to that for specialisation is to approach more familiar ground, for the upper forms of our High and other Secondary Schools, the classes in Polytechnics for special preparation for business and for home arts, art classes, etc., supply more or less suitable models of the organisation required.

To conclude, such questions as the choice of subjects, the distribution of time, and the age of specialisation demand separate and later consideration; but they need present no insuperable difficulties when once it is conceded that the spirit of the education suggested is the right one, and that it would tend to make the woman of the future healthier-bodied, wider-minded, larger-hearted, with more adaptability and more sympathy, and, consequently, more power and more charm.

(13.) THE INTEREST OF GIRLS IN SECONDARY EDUCATION

(iii.) *By* MISS A. LUMBY, *Principal of St. Hilda's College, Cheltenham.*

The Needs of Girls not fully supplied by the Present System.

THERE was a time when the education of girls practically took care of itself; but the past thirty years have wrought a great change, and it is now obvious that the requirements of girls will have to be specially considered in any reorganisation of Secondary Education. Their interests run parallel with those of boys, but are not identical with them, and if the reformed system of education is to meet the requirements of the present time, some important new developments will have to take place. Every year adds to the number of women who have to support themselves by their own work. The expense of living increases, the rate of interest on money goes down, and fathers find it impossible to provide for their daughters so as to put them beyond the necessity of earning for themselves. Happily, the pressure of this obligation

to work has brought with it an increased sense of the dignity of work, and the days are gone in which a woman was despised if she could not afford to live in idleness.

One-sided Development of Girls' Secondary Education in the past.

But hitherto the development of the means whereby our girls shall earn their living has not gone on *pari passu* with the development of educational facilities for girls. Women now share educational advantages which were originally intended only for men, and this fact has affected the whole development of girls' education. But they do not yet share in the wide field of life-work which is open to their brothers.

The defects which we find in the supply of boys' schools are reflected to a still larger extent when we look at the lack of variety in schools for girls. With University honours within the scope of their laudable ambition, girls' high schools have made their curriculum as much like that of boys' schools as possible, in order that those girls who were capable of doing so might take a University course. Those with ability and means have done so, and some, but still too few, with ability and without means have been helped by scholarships to do the same. This influence has had a splendid effect in raising the standard of teaching in these and other advanced Secondary Schools ; but it has had also a tendency to limit the curriculum of the whole school to somewhat bookish subjects, and when

these girls have to work for themselves they rarely find that they can do anything but teach. Now, the teaching profession is already notoriously overcrowded, and the effect of pouring more teachers into it is to make it hardly possible to live by it any more. Not all these women make good teachers, and yet too many of them must teach; and meanwhile a large amount of valuable activity is lost to the country altogether, because they have no chance of developing by education other powers which they may possess and could use to their own benefit and that of the community.

Need for more Practical Forms of Education in the Future.

What we need are schools for girls which shall combine with general education something corresponding to the special instruction given to boys at Polytechnics and science schools, but better adapted than these actually are to the requirements of girls. Just as boys can get their training in engineering or surveying or science at such schools, and have scholarships to help those who need it, so girls should more widely than at present have means provided whereby they might learn domestic economy, cooking, dairy or laundry-work in a practical fashion, such as would make it possible for them to do such work professionally. These things need not take nearly so much time as a boy has to give to his future profession; and so

it would be possible for girls to keep up their reading and continue that most important part of a woman's training, the general cultivation of her faculties of thought and imagination. This side of education, the side of literature, which seems in danger of being crowded out of boys' education by the pressure of competition, might be saved to the country by the girls, and that culture and refinement brought into homes which the young learn more readily from their women-folk than from any other source.

The Value of Secondary Education (*a*) to Women who Work.

Those girls who have to earn their living would be helped incalculably by the wider spread of means for such education, intermediate between the elementary schools and the upper classes of the high schools. At present far too many of our girls leave school at fifteen or sixteen, with a mere smattering of information on many subjects and nothing that they can use. The Secretary of the newly-established Women's Employment Bureau complains of the difficulty of finding work for the women who apply; out of five hundred not fifty have found posts through the Bureau, and this solely because they are not qualified to do anything properly. They all want to undertake the vague duties of "secretary" or "housekeeper," because they have had no training at all, and fancy that these posts require none. If it had been possible for these

women to continue their education up to the age of seventeen or so in some definitely useful branch of work, it would not be so difficult to help them now. There is plenty of work that needs doing, if there were people ready to do it. We let thousands of pounds go out of our country every year which our women could save for us, making their own lives bright and useful at the same time. In the management of dairies and poultry farms alone, trained and intelligent women should be able to do capitally, and there are countless other forms of activity which we waste because we will not spend money upon the education necessary to develop them.

(*b*) to Women in the Home.

We have spoken as though all girls were preparing to earn an independent living, which is far from being the case. After all, woman's great work in life is the making of the home, and the majority of our girls are destined to be married. Would this Secondary Education then be wasted? By no means. When we think what a different world it would be if most young wives possessed more practical acquaintance with *things*, as apart from books, if they knew a little domestic economy, how and what to buy for food and clothing, how to cook and how to clean, and understood something of the laws of health and something of the laws of their country, we need not ask such a question. And the wider views of life, the more

disciplined frame of mind that would come of prolonging the years of education so as to escape the listlessness of that awkward time when the girl of sixteen has just left school—what a blessing these would be to the husband no less than to the wife! The gain would not be for the one home alone. We are notoriously among the most wasteful of nations, and our wastefulness comes chiefly from ignorance. A better educated wife would make a thrifty home, and many thrifty homes would end by making a thrifty nation. The idea of management, of true economy, would spread in the nation and the standard of comfort would be raised, while expense was lessened.

Women must have a share in the Organisation of Girls' Education.

In any reform of Secondary Education, then, it will be necessary to safeguard the interests of girls, and to prevent their education from sliding again into the same groove as that of boys for lack of attention to the details in which it should differ. The interests of girls are as great as those of boys, but, as we have tried to show, they are not identical. To provide for the specially feminine side of the new development, women, trained and experienced women, should have a share in the organising of it. Those councils and local authorities which will have to adjust the supply of education to the needs of each particular district should have among their members women who realise the wants of girls,

and whose practical experience gives them a right to speak with authority. Otherwise the whole thing will be planned for boys, and girls will be left to make the best they can of it. All those who are interested in the welfare of our girls—and who is not?—should keep this fact in mind, and bring their influence to bear in the right direction when the opportunity comes.

(13.) THE INTEREST OF GIRLS IN SECONDARY EDUCATION

(iv.) *By* H. BENDALL, M.A., *Secretary to the Joint Scholarships Board.*

THAT girls have an immense interest in Secondary Education is, in the present day, almost a truism. In few matters of such paramount importance to society at large has public opinion declared itself more clearly in favour of a change of front. The veteran schoolmaster, Mulcaster, remarked three centuries ago that it was not the custom of his country for girls to attend grammar schools; and it is a significant fact that not one out of scores of benefactresses of old grammar schools was unconventional enough to make special provision for her own sex. The primitive Christians boasted that they gave education to all classes and to both sexes without distinction, and some amongst their number even defended the cause of the higher culture of women. But it has been reserved for this century to apply these principles in Europe, and wherever European civilisation prevails. The fashionable world in Addison's day was decidedly

suspicious of a woman "who had dared to read," and still more of one who ventured to admit the fact. And even in our own time there are traces of a similar prejudice, despite the overwhelming consensus in favour of a sound general education for girls beyond the limits of elementary subjects.

No Sex-distinction in Education.

But when once the State had lent its aid to the development of a Primary School system, in which girls shared equally with boys, it became evident that whenever Secondary Education came under consideration no sex-distinction should be made. The Schools Inquiry Commission a generation ago emphasised the want of thoroughness, of system, and of intelligent teaching even in accomplishments, to which excessive attention was paid. In fact, the obvious defects of too many boys' schools were reflected and even magnified in girls' schools. Since that time much has of course been done to level up girls' education. But very much yet remains to be done. And it is clear that unless Governmental aid is called in, we cannot look for any great extension of facilities for the Secondary Education of girls within a very long time indeed.

Lack of Public Schools for Girls.

If endowed Secondary Schools for boys are too few, and, with a few exceptions, insufficiently endowed, what shall we say of similar schools for girls, which do not form

one-fifth of those at the disposal of their brothers, of whole counties and scores of towns without a single Secondary School where girls can attend of right? We do not for a moment deny that such areas may, and in many cases do, possess efficient private or proprietary schools; but these do not find it in all cases to their interest to entertain every application for admission, and fear of a rebuff no doubt deters parents from asking what they feel may be thought a favour on the part of such school authorities. The spread of the High School system, notably under the Girls' Public Day School Company, shows that a large demand for High Schools exists, and from the analogy of the Welsh Intermediate Schools we learn that schools of this type may count on local support, even in not very thickly peopled districts. Similar evidence might be drawn from the experience at Polytechnic and Technical Schools, where a more specialised form of Secondary Education is to be had.

State-Aid wanted.

But we cannot doubt that, whatever existing agencies may do, there is room for a great development in the direction of State-agency to aid and supplement whatever means are now available, and to create and organise fresh means of supply where they are deficient. If no other proof were found than the experience in Wales, that alone would be enough for our purpose, for within a few years from the public Act for establishing Intermediate

Schools, the number of girl pupils attending public Secondary Schools has already risen twelve-fold—from less than 300 to more than 3000.

It is of course true that the means of livelihood open to well-educated women cannot compare in number and variety with those open to men, but at least it cannot be disputed that the possession of a sound general education based upon all-round training of the faculties now opens to women a larger field of usefulness than heretofore; and it seems to us that the development of a system of girls' Secondary Schools, corresponding to what used to be called "second-grade" Secondary Schools for boys, is the great educational desideratum of the day.

Needs of Women Workers.

Such a school would fit a large number of women workers for entrance into the higher classes of Technical Schools, and enable them to arrive at a riper stage of general intelligence before they adopted special courses of training for the increasing number of employments, both commercial and industrial, which are now being opened to them. And while such a school would contribute no little to the actual earning-power of the great army of women workers who are able to prolong the period of their education to the sixteenth or seventeenth year of their age, it should also prove of advantage to those who would live at home, and fit them for the domestic and social duties which fall to their

lot. Care would no doubt have to be taken that the education thus given should not be of an uniformly bookish character.

Practical Training for Girls.

Experimental subjects should prove, in the case of girls, as useful as, if not more useful than, in the case of boys. Whatever may be the work in life which a woman may have to do, she will find in it the value of observation and calculation in dealing with things themselves: not that she need undervalue the faculty of expression and of "thoughts about things" which are the special outcome of a literary and language training.

How real is the interest of girls in Secondary Education is best shown perhaps by the recollection that within the last fifty years there has sprung up from the opening of endowments a goodly crop of schools for their benefit, that many large proprietary schools have been founded, and that wherever Government Departments have been able to afford facilities, girls share in educational institutions.

But rapid as the development has been, there is yet room for much work in the field, and it is largely in the hands of women themselves both to press for more public help in this direction, and by their influence as members of public bodies to see that the interests of their sex are rightly safeguarded.

(14.) AUTHORITIES FOR SECONDARY EDUCATION: CENTRAL AND LOCAL

By GRAHAM BALFOUR, M.A., *Assistant Secretary to the Local Examinations Delegacy, Oxford.*

Too many Departments.

IN the beginning of the Queen's reign a most complicated system of management existed in the royal palaces. The authority and duties of different officers of the royal household had survived in forms so little suited to existing circumstances that three servants working in the same room might be responsible to three different Officers of State. The housekeepers, pages, and housemaids were under the Lord Chamberlain, the footmen were under the Master of the Horse, and the cooks and porters under the Lord Steward. It was the Lord Steward who was responsible for finding the fuel and having the fires laid, while the Lord Chamberlain had to provide for having them lit. The outside of the windows, moreover, was in the charge of the Department of Woods and Forests, and it was the care of the inside of the panes only

which belonged to the Lord Steward. The natural consequence of all this was that it took months of official correspondence before the commonest repairs could be executed, and that many most necessary duties were left altogether undone because it was nobody's business to do them. By the exercise of a little common sense and tact these anomalies were remedied, economy was effected, and the work in future was better done.

But though these abuses have become a mere curiosity of the past as far as the Queen's household is concerned, absurdities quite as great are in full swing in our educational system. Here, too, we have four public bodies doing the work which in most countries is confided to one, or at the most two authorities; and even these four do not include the governing bodies or the universities and other institutions which, by their examinations, have done so much to raise the general standard of Secondary Education in England.

Four chief Authorities in Secondary Education.

Of the four authorities three are central — the Charity Commission, the Education Department, and the Science and Art Department, while the fourth is local—viz. the County Councils.

The Charity Commission.

The Charity Commissioners have existed since 1853 for the better administration of all kinds of charitable endowments; but their most important

powers, as far as education is concerned, are those supplied by the Endowed Schools Acts, dating originally from 1869. In the case of an educational charity, the Commissioners may propose a new scheme, but it must be approved in the first instance by the Education Department, and ultimately be submitted to both Houses of Parliament. The endowments known to be subject to the Endowed Schools Acts are of very great value. From these sources about £650,000 a year is available for education. It will thus be seen that the Commission is a most important body, and that the framing of its schemes has exercised a very great influence in Secondary Schools.

The Education Department. Next comes the Education Department, which was founded sixty years ago, and controls all the public elementary schools, whether Board or voluntary schools. It is popularly supposed to have no connection at all with Secondary Education, but to this limit there are two great exceptions—many of the Higher Grade Board Schools as at present administered, and the Evening Continuation Schools. All the pupils in Board Schools were confined at first to six and then to seven standards of proficiency. But as some of them passed the Sixth Standard before they were ready to leave school, so they outgrew also the seventh, and from want of a suitable higher school or some other reason they still remained in the public

so-called elementary school. In some instances a number of the most promising children from different schools were collected in one superior establishment, in others an ordinary Board School added an additional "ex-Standard VII" class at the top. Some people have denied that such schools are Secondary at all, but the Royal Commission on Secondary Education in 1895 definitely pronounced them to be Secondary "as regards the higher part of their curriculum," and it is not easy to see what opinion on this point could have greater weight. Some of the School Boards have, in fact, supplied most valuable and much-needed lower Secondary Education; but the Education Act of 1870, under which they earn their grants, limits its aid to schools in which "elementary education is the principal part of the education given."

In Evening Continuation Schools since 1890 this restriction is no longer necessary, though in all respects they remain under the control of the Education Department. Since the Code of 1893 these schools have entered on a new phase of prosperity, and within the last four years the attendance has trebled.

The Science and Art Department.

Third comes the Science and Art Department, which has its headquarters at South Kensington. It also is a public department, and has existed for more than forty

years in its present form. It gives grants throughout the country to schools and to individuals for instruction in science and art according to its regulations, and also is the central authority, as far as any such authority exists, for technical instruction. Its action and separate grants have had an immense share in the development of the "secondary" portion of the Higher Grade Elementary Schools.

It should be added that the "Schools of Science," though educationally inseparable from the best Higher Grade Schools of which they form the crown, are not under the supervision of the Education Department at all, but of the Science and Art Department. Yet the class-rooms in which the work of the "School of Science" is carried on may be an integral part of the building of a public elementary school, and the funds for their erection may have been raised by the School Board as part of the Elementary Education Rate. One headmaster presides over the Higher Grade Board School (including its "School of Science" portion); but the Education Department Inspector will now enter the School of Science class-room, or the Science and Art Inspector the class-room of the Elementary School proper.

The County Councils.

Fourthly, there are the County Councils, which were established in 1888. In 1889 they received power to levy a rate for "technical instruction,"

and in 1890 Parliament transferred to them a very large sum of money, raised annually by beer and spirit duties, and popularly known as "whisky money." A large portion of this may be assigned to "technical instruction," and the amount actually so appropriated in England alone was, according to the latest statistics, two-thirds of a million sterling. The Science and Art Department has had to decide what subjects may be taught under the heading of "technical instruction," and it has admitted every subject which can reasonably be taught in Secondary Schools except Latin and Greek.

It cannot, however, under the Technical Instruction Act 1889, recognise any subject of instruction except so far as it has a "technical," or "commercial," or "agricultural" value. The tendency, therefore, has been to regard subjects from the point of view, not of educational efficiency or the general effect on the character and aptitude of the pupil, but of commercial advantage or of specific preparation for a trade or employment. This has necessarily had a most injurious effect on the studies of many schools.

One School may have five Authorities.

So, in addition to its own governing body, one school may come under the harrow of four authorities, besides having to submit to the mercies of the Oxford and Cambridge Joint Board, or the Local Examinations,

or the College of Preceptors, and having also to prepare its pupils for numerous university and professional examinations. Thus it may be worked under a scheme of the Charity Commissioners, which must have been sanctioned by the Education Department; it may be earning grants from the Science and Art Department, and therefore fettered by its regulations; it may also have a grant from its County Council, subject to its restrictions.

The School Board and the County Council may be dissatisfied with its management and jealous of one another, and there is nothing to prevent them from erecting and subsidising two fresh schools in the same town, instead of rendering one really efficient.

In fact, the Lord Steward is finding the fuel and laying the fires, and the Lord Chamberlain is lighting them. The same pane of glass still has its two sides cleaned by different State Departments.

This may be sanctioned by tradition, but it is not businesslike, it is not economical, it is not common sense.

English Secondary Education should be controlled, so far as any central control is necessary, by one department or one branch of a department only, organised for that single purpose, but in full sympathy and free communication with the authorities for elementary and higher education.

The present confusion is scandalous, the waste of ability is immense, and the sooner our national capacity for practical administration is given a chance, the better it will be for the English nation as a whole.

(15.) THE BOARD OF EDUCATION BILL

(i.) *By* GRAHAM BALFOUR, M.A.

EARLY in the present Session the Duke of Devonshire, Lord President of the Privy Council, introduced into the House of Lords the Board of Education Bill. It was not altogether a new measure, for it was the amalgamation of two Bills which had been read once at the end of the previous Session, but merely for the sake of taking public opinion on them. The whole question must therefore be studied in the light of the speeches delivered by the Duke of Devonshire in bringing in the Bills in the House of Lords on August 1, 1898, and again in introducing the present Bill on March 14, 1899.

The Board of Education Bill.

The present Bill proposes to deal both with Elementary and Secondary Education. The changes proposed in the former are no doubt important, as they are likely to render its administration more efficient, and to cause Elementary Schools to be regarded no longer as a thing apart from the more

advanced teaching of the country. To Secondary Education the new measure is far more vital, because it proposes to unite the scattered powers which have hitherto affected the development of the different parts of the system, if system it can yet be called.

What exists at present.

The three chief Departments which have hitherto dealt with education in England have been the Education Department, the Science and Art Department, and (indirectly through their control over most educational endowments) the Charity Commissioners.

The Education Department deals with all the public Elementary Schools and Evening Continuation Schools in England and Wales, and thus with all the work (except such part of their teaching of Science as is under the supervision of the Science and Art Department) of the Higher Grade Board Schools. Some of the Evening Schools teach advanced stages of certain subjects.

The Education Department is under the control of a Committee of the Privy Council, and is presided over by the Lord President of Council, and a Vice-President, who is a member of the House of Commons and holds no other office. Under these are a permanent secretary and a large staff of examiners, inspectors, and clerks.

The Science and Art Department gives grants for the teaching of Science and Art, and is charged

with the duty of interpreting and applying the definition of "technical instruction" contained in the Technical Instruction Act, 1889. It likewise is under the Lord President and the Vice-President, but not under the Committee of Council. It has a permanent secretary of its own, and an entirely distinct set of officials.

The Charity Commission consists of a Chief Commissioner with three Commissioners appointed under the Charitable Trusts Act, 1853, and a permanent secretary. The Commission has a collective responsibility for the administration alike of the Charitable Trusts Acts and of the Endowed Schools Acts, the latter including the Welsh Intermediate Education Act of 1889. Through their jurisdiction over endowments the Charity Commissioners exercise a far-reaching influence over Secondary Education. Their powers are wide, but are exercised under complicated forms of procedure and subject to various statutory checks in Parliament and elsewhere. A few endowed schools are exempt from the jurisdiction of the Charity Commissioners. Largely owing to their having an inadequate number of officials, the Commissioners have never exercised any continuous inspection of the educational work of Secondary Schools in England. In Wales they are now (under the Welsh Intermediate Education Act, 1889), to all intents and purposes, the Central Authority for Secondary Education.

What the Present Bill proposes.

The Government Bill proposes to amalgamate the Education Department and the Science and Art Department, under the name of the Board of Education, on the model of the Board of Trade, the Local Government Board, and the Board of Agriculture. The President of the Board, however, need not be a Peer, and so may be a member of the House of Commons. But if the President of the Board is at any time not a member of the House of Commons, one of the Secretaries of the Board, if duly elected, may represent the Board there. In the mean time, Sir John Gorst is to be Vice-President of the Board, but after his tenure of it, that office is to cease.

Any of the powers of the Charity Commissioners in matters appearing to Her Majesty to relate to Education may be transferred to the Board of Education by an order in Council, but the decision as to what endowments are educational rests with the Charity Commission.

The Consultative Committee.

Her Majesty in Council is empowered by the Bill to appoint a Consultative Committee, which will be an Educational Council under a less high-sounding name. The Government fully recognises the fact that the advice of educational experts may be of great service to the Board of Education. It is proposed that the chief statutory duty of this committee, in addition to its advisory function,

shall be to frame, with the approval of the Board, regulations for the formation of a register of teachers. One of the Bills introduced last Session provided for such registration, and the aim and range of the present clause will presumably be the same as those of the regulations then proposed. Admission to the register was to be offered on the same terms to teachers in whatever class or kind of educational institution they may be engaged or seeking engagement, and persons engaged in private tuition are to be entitled to the same privileges in respect of registration as persons actually engaged in schools. Thus the register was to be open to talent and competence in all ranks. "No exclusiveness, but a high standard of efficiency," seemed to be the motto of the Bill. The nation will cordially welcome this wise adoption by the Government of the fundamental principle laid down by the Royal Commission on Secondary Education. The details of any scheme of registration are bound to be complicated. The needs of different types of Secondary Schools obviously vary within wide limits. But there can be little doubt that Parliament will sanction the broad principle that the register of persons qualified to teach in Secondary Schools should be comprehensive in scope, catholic in constitution, and discriminative in point of quality of attainment. Quacks we shall have with us to the end of time, as well in education as in medicine. But there is

no doubt that the establishment of an authoritative register will do much to raise the minimum level of efficiency among teachers in Secondary Schools, and to stimulate the rising generation of teachers to qualify themselves more fully for the responsible and difficult duties which lie before them in the practice of their future profession.

Inspection of Schools.

The new Board may inspect any Secondary School which desires inspection, and any County Council or County Borough Council may defray the cost of the inspection of any such school within their area, out of the money now available for Technical Education. The inspection may be made by the officers of the Board, or by any University organisation approved in that behalf by the Board, after taking the advice of the Consultative Committee.

The Duke's Speech.

These are the chief provisions of the Bill, which is characterised by extreme simplicity, and aims rather at the economical concentration of existing powers than at the creation of a new bureaucracy. Parliament is asked to lay down principles; the new constituted Education Office would, with the aid of a Council, apply the principles to the details of practice. All money grants, however, will have in the future, as in the past, to come from the House of Commons. In the Duke's opinion the reorganisation of the Department need not, *so far*

as mere administration is concerned, lead in the aggregate to any actual increase of public expenditure. Another very important indication given by the Duke of the intentions of Government is to the effect that the Board of Education will have one permanent chief secretary, and that there will be three divisions devoted respectively to the work of Elementary, Secondary, and Technical Education.

Local Authorities.

The thorny question of the Local Authority for Secondary Education is not touched in the Lord President's Bill. It is admitted on all hands that, for the work of providing new public Secondary Schools, a strong and consolidated Local Authority is an indispensable thing. The nation needs, in the great work of education, all the local interest and local enthusiasm which can be excited and maintained. But there is also a strong feeling that the time has not yet come for great activity in establishing new Secondary Schools. Our first duty is stock-taking. We have to find out the quality of the schools we already possess. This knowledge is not yet to hand. In order to acquire this information (essential to any prudent and economical employment of our existing resources), the country needs for a year or two the services of a well-equipped and wisely organised Education Office, with power and means to inspect schools and to ascertain the true needs of the country in this matter of Secondary Education. And the

Education Office in this preliminary task of inquiry will need the guidance and support of a good Educational Council and of all the existing local educational authorities.

Public Opinion.

But the success of these two measures, like the success of any other piece of legislation, depends upon the spirit of those who will administer their provisions, and on the force of public opinion in their favour. The country is waking up at last to the extreme importance of the question of Secondary Education. Week by week there are more signs of increasing interest in the problem, and the time has come at last for action. It is of the utmost importance that the Government Bill should be passed without further delay. It is, after all, only the beginning of reforms, and its administration will require all the wisdom and patience and experience that can be brought to bear upon it. With goodwill and consideration a friendly understanding will in time be reached, even on such contentious questions as the composition of the Local Authority, as all sections of educational opinion, however sharply divided in their views, are animated by the desire to promote what they conceive to be the public interest. In the mean time, the most important thing to be done is to encourage the Government to pass their Bill, and then to strengthen their hands in developing its administration on wise, considerate, and practical lines.

(15.) THE BOARD OF EDUCATION BILL

(ii.) *By the* REV. A. R. VARDY, *Head Master of King Edward's School, Birmingham.*

THE Bill which was introduced into the House of Lords by the Lord President of the Council on March 14, 1899, is, like its predecessor of August last, an outline, the details of which may be filled in very variously, and which may prove to be the first step in a legislation beneficial or harmful to Secondary Education, according to the way in which those details are supplied. In some points it marks an advance upon the previous Bill—an advance in the right direction, and this may, perhaps, be taken as an omen of further development in the same direction hereafter.

The important provisions of the Bill are contained in Clauses 2, 3, and 4.

Clause 2. Duties and Powers of Board of Education.

"(1) The Board of Education shall take the place of the Education Department (including the Department of Science and Art), and all enactments and documents shall be construed accordingly.

"(2) It shall be lawful for Her Majesty in Council,

from time to time, by Order, to transfer to, or make exercisable by, the Board of Education any of the powers of the Charity Commissioners in matters appearing to Her Majesty to relate to education, and the Order may make such provision as appears necessary for applying to the exercise of those powers by the Board of Education the enactments relating to the Charity Commissioners.

"Provided that any question as to whether an endowment, or any part of an endowment, is held for or ought to be applied to educational purposes shall be determined by the Charity Commissioners."

On this clause two important considerations suggest themselves—

1. It seems specially desirable that from the outset such a threefold division of the Board of Education should be recognised as was indicated by the Lord President in August, 1898, when he suggested that it would probably be so organised as to consist of three Departments, dealing with Primary, Secondary, and Technical Education respectively. Each of these three branches of Education has its own distinctive features, and needs to be treated separately. To take a single illustration: The inspection of Secondary Schools is something quite different from the inspection of Primary or Technical Schools; it has a different outlook; it deals with different subjects and different methods; the problems it has to solve are wholly different; and it should be in the hands of a different inspectorate. Her Majesty's Inspectors of Primary Schools and the Inspectors

attached to the Science and Art Department would probably be the first to disclaim their own fitness for judging of the organisation and work of our great Secondary Schools.

2. While there are advantages in the provision which permits the powers of the Charity Commissioners to be taken over, from time to time, by the new Board in pursuance of an Order of Council, it would obviously be inconvenient that those powers should be so transferred as to leave a school partly under the Charity Commissioners and partly under the Board of Education. The result might possibly be that the Commissioners would exercise a control over the income, and the Board over the expenditure, of the school; the latter insisting on changes which involved outlay, and the former refusing to allow the necessary means. It is not easy to see how this difficulty is to be met except by a complete transfer, at an early date, of all powers relating to education from the Charity Commissioners to the new Board, and it is to be hoped that such a transfer will be facilitated by those departmental changes to which the Lord President referred in his speech.

Clause 3. Inspection of Secondary Schools.

"(1) The Board of Education may, by their officers or by any University organisation approved in that behalf by the Board, after taking the advice of the Consultative Committee hereinafter mentioned, inspect any school supplying secondary

education and desiring to be so inspected, for the purpose of ascertaining the character of the teaching in the school, and the nature of the provisions made for the teaching and health of the scholars, and may so inspect the school on such terms as may be fixed by the Board of Education with the consent of the Treasury.

"(2) The council of any county or county borough may, out of any money applicable for the purposes of technical education, pay or contribute to the expenses of inspecting under this section any school within their county or borough."

The recognition, under this clause, of alternative inspection by any University approved by the Board is a concession which will be gladly welcomed by those schools which are closely in contact with the older Universities, and which have been accustomed to look to them for guidance and assistance in their educational work.

It is not quite clear to what schools inspection will directly apply. The terms of the clause seem to make inspection wholly optional. "The Board of Education may . . . inspect any school supplying Secondary Education and *desiring to be so inspected.*" In introducing the Bill, however, the Lord President spoke of the immediate transfer from the Charity Commissioners to the Board of Education of the inspection of schools which are under schemes framed by the Endowed Schools Commissioners. This inspection, which was at first purely administrative, has in recent years been somewhat extended by the Charity Commissioners,

who have, in dealing with most schools under the operation of their schemes, required that a copy of the Report of the annual examinations should be transmitted to them, and who have claimed to render assistance to, and exercise control over, the Governors of the schools in the educational part of their work. Such inspection does not differ very widely from the inspection established under this Bill, and if it is to be applied at once by the Board to all schools hitherto under the Commission, it would appear that for a large number of schools it will not be optional, but compulsory. Out of ninety English schools represented on the Head Masters' Conference, it would probably be compulsory on fifty-seven, and it would be optional only for the seven Public Schools and for schools of recent foundation, and therefore not under the Endowed Schools Acts. It would be, for example, compulsory on Christ's Hospital and Dulwich, optional for the City of London and University College Schools; compulsory on Sherborne and Uppingham, optional for Haileybury and Marlborough.

It is obvious that, under such an arrangement, no national organisation of Secondary Education is possible; and at the present opportune moment —when, as the Lord President has informed us, the Head Masters of most of the Public Schools (the largest and most important of them included) have expressed their willingness to come, on certain

reasonable conditions, under a system of general inspection by the Board of Education—it seems matter for regret that an attempt should not be made to comply with those conditions, and to unite all the Secondary Schools in the country in one strong and complete organisation.

The only conditions that apparently present any difficulties are (1) that Inspectors of recognised competence should be appointed; and (2) that inspection, if compulsory, should be gratuitous. The Lord President explained that Inspectors of such a calibre as to command the confidence of the great Public Schools would not be easily found, and, if found, would have to be highly remunerated.

Doubtless the great Public Schools would demand highly competent Inspectors; but Inspectors of such a character are even more necessary for the smaller and poorer schools, where a just estimate of buildings, equipment, staff, and educational work will demand even greater knowledge and wider experience than would be required in the inspection of schools of established reputation and proved efficiency.

As regards cost, it has been estimated that for the remuneration of such competent Inspectors a sum of £20,000 might be needed annually—a sum small as compared with the public advantage which would undoubtedly be secured by general inspection.

It may be added that the work of inspection

will be greatly facilitated and the cost greatly reduced if, as the Head Masters' Conference has recommended, it is as far as possible separated from the actual examination of the scholars. The words, "the character of the teaching in the school," in the above clause of the Bill, are vague, and it would be most undesirable to add, under the name of Government inspection, another examination in schools that are already sufficiently examined by external authorities. Inspection conducted on such lines might also tend to impair that freedom in teaching and internal organisation of which Public Schools are justly so tenacious, and to give rise to the suspicions of "bureaucratic control" which the Lord President desires to avoid.

Clause 4.
Consultative Committee.

"It shall be lawful for Her Majesty in Council, by Order, to establish a Consultative Committee, consisting, as to not less than two-thirds, of persons representing Universities and bodies interested in education, for the purpose of—

"(*a*) framing, with the approval of the Board of Education, regulations for the formation of a register of teachers; and

"(*b*) advising the Board of Education on any matter referred to the Committee by the Board."

The establishment of such a Consultative Committee is earnestly desired by the teaching profession, and the substitution of a permanent body for that proposed in the Bill of last August is to

be regarded with great satisfaction. It is hoped that, at a later stage of the Bill, adequate assurances will be forthcoming with regard to the constitution of the Committee, and especially with regard to the representation upon it of the interests of Secondary Education, and of the interests of girls as well as of boys.

By relegating to this Committee the duty of framing regulations for the formation of a register of teachers, the necessity for a separate Registration Bill is satisfactorily obviated, and we are brought nearer to the realisation of a desire which has long been cherished by all interested in the complete organisation of national education.

(16.) THE SAFEGUARDS OF ORGANISED SECONDARY EDUCATION

(i.) THE ADVISORY POWERS OF THE CONSULTATIVE COMMITTEE.

By H. BENDALL, M.A.

A Consultative Committee essential.

THE organisation of Secondary Education could not, of course, be considered complete without a Central Authority, and the Central Authority which we hope to see brought into existence will, in its turn, be incomplete unless it has at its side a body of what might be called educational assessors to aid it with advice where necessary. Besides the ordinary work of the Central Board other matters would undoubtedly arise from time to time in which it would be particularly desirable from the minister's point of view that he should have ready at hand the advice of persons who have special knowledge of educational matters and who hold a somewhat independent position. Such an advisory body would not relieve the minister, nor is it desirable that it should relieve him, of

any responsibility which really must belong to him, but it would undoubtedly tend to dispel the belief that the purely official spirit will predominate in the department, and serve to mitigate the apprehensions which have been and may still be felt on the part of those who have expressed fear for the freedom, variety, and elasticity of Secondary Education.

Functions of the Consultative Committee.

The functions of the Consultative Committee would be, of course, to advise the minister. Whether the advice, when given, were taken or neglected, the minister would be liable to parliamentary cross-examination and would, at least in important matters, be forced to take into consideration the views proffered by his official advisers, and in public to show cause for the course that he might have adopted. Among the matters which would be particularly within the sphere of influence of the Consultative Committee would be the determination of types of schools, the methods of inspecting the schools, the inspection of the pupils in attendance, the registration both of efficient schools and of efficient teachers, and, last but not least, the cases of appeal within the profession. Its existence would tend to give educational life where there is, to say the least, a slight danger in the direction of departmental rigidity and administrative uniformity. The variety of types amongst Secondary

Schools and the corresponding variety of curricula within these schools stands in contrast to the uniformity that is possible in Primary Schools under an education code. It has, in fact, been suggested that the Committee might even render aid to the minister, by acting as a kind of departmental committee to whom the minister could refer, for inquiry and report, questions on which he desired to have facts collected and sifted, or practical suggestions formulated.

(i.) as regards Local Authorities.

The fact that Secondary Schools would, for the first time, be brought into definite relationship with public Local Authorities under a completely organised system of Secondary Education would, in itself, appear to suggest the propriety of establishing some body empowered to regulate such relationships and to adjust them when necessary. The case, for instance, of a Governing Body of an existing school appealing from a Local Authority's decision, or an appeal from the proprietor of a private school, would be one upon which the Education Minister would hardly care to form an opinion without the aid of the assessors of his Board, the members of the Consultative Committee.

(ii.) as to Registration of Teachers.

And although in the proposed Board of Education Bill the Consultative

Committee is no longer to be utilised for the keeping of a Teachers' Register, such a body would obviously be the right one to lay down the principles and frame the regulations according to which the register should be drawn up and maintained.

(iii.) within the School. Among the internal matters which would come more especially under the cognisance of the Consultative Committee, would be the numerous questions connected with inspection of schools and examination of scholars. We do not, in this connection, refer to the administrative inspection which, of course, belongs to the Board of Education itself, for that deals with the sanitation of the school, with the scheme, its finances, and the relations of the Governing Body to the Local and Central Authorities. The inspection we have to consider in connection with the Education Committee is that which is concerned with the efficiency of the school in respect to education given to the scholars in attendance, and would have an important bearing on time-tables and subjects, on staff and on appliances, and lastly, few schools would be content without offering some of its pupils, at least, for examinations by some external body. Examinations, as is well-known, are at present too numerous and too little correlated one to another. The Consultative Committee would be able, perhaps, to amalgamate some of these

examinations; but it could at least temper the wind to the schoolmaster by laying down the type of examination which should, in their opinion, satisfy the requirements of his Governing Body, and enable him to dispense with attempts to set his sails according to every examination wind.

Such would be the functions of a Consultative Committee, and it will hardly be disputed that their existence might be of great service alike to the minister and to the institutions which would be brought under his control.

Such a body should not, of course, be very large. If it is to be efficient, its numbers should not exceed twenty-five. A very large Consultative Committee would tend to miss the very objects for which it should be called into existence. Members would not be in sufficient touch with one another or with the circumstances, and would prove less serviceable to the minister than his permanent staff.

(16.) THE SAFEGUARDS OF ORGANISED SECONDARY EDUCATION

(ii.) THE INSPECTION OF SECONDARY SCHOOLS.

By H. T. GERRANS, M.A., *Secretary to the Local Examinations Delegacy, Oxford.*

AMONG the many valuable things contained in the Board of Education Bill none perhaps could prove of more service in the future than the inspection of Secondary Schools. The Bill, it is true, does not itself propose to make this either compulsory or gratuitous; but it seems clear that inspection will have a definite and increasing part assigned to it in the administration of the future.

Inspection of Primary different from that of Secondary Schools.

In this proposal to inspect there is nothing which need cause alarm to the most timid or the most independent. The dangers which seem to be chiefly feared are a drawing of too close an analogy between Primary and Secondary Education, and a possible interference by

inspectors, directed towards an artificial uniformity among Secondary Schools.

As to the analogy referred to, it must be remembered that a marked distinction between Primary and Secondary Schools has long existed which is specially seen in inspection itself, and in the results dependent upon it. Inspection, so far as it has been brought to bear upon Secondary Schools, has usually been supplementary to examination; whereas in primary schools, until within the last few years, inspection was itself an examination, and almost the only examination that public elementary schools ever underwent. With regard to the results dependent on inspection in primary education it must be remembered that nearly all inspected elementary schools depend for their very existence on the Government grant, the amount of which is materially affected by the report of the inspector; whereas Secondary Schools, as a rule, enjoy a far more independent position. No arbitrary coercion could be exercised over schools which held to their own ideals, and trusted to the public and to a healthy local feeling to support them in their independence. In dealing with Secondary Schools as a whole, we are dealing with an old-established system, possessed of great power and far-reaching influence—a system which is not in the least degree likely to be transformed into something else against its will.

The Value of Inspection as distinguished from Examination.

Valuable as examinations rightly used may be, it is evident that they cannot serve as a guarantee that any school is in every respect satisfactory. A school may gain all manner of scholarships, and send in large numbers of candidates who obtain certificates without one single failure; and yet the premises may be quite inadequate, the class-rooms and apparatus unsuited to modern requirements; or, again, the teaching may be over-specialised, the backward boys neglected, the curriculum too narrow, the hours too long. These points can be observed and recorded by a competent inspector in the course of his visits; and if he be a man possessed of intelligence, sympathy, and tact, free from preconceptions and fads, he may discharge his duties with perfect efficiency, and yet without causing any friction or bad feeling in the schools upon which he reports.

From inspectors appointed under such a system it is, of course, undesirable that anything like examination of individual pupils should be required; but they can hardly make complete and satisfactory reports on schools unless they are allowed at discretion to ask for information about the instruction given and, if necessary, to observe the methods of giving it. There are many points for which a really good school would not obtain full credit, if difficulties were placed in the way

obtaining such knowledge as can only be reached by an efficient inspector.

The province of examination is quite distinct, and may be left to the Universities and other agencies which have originated and developed organisations for this purpose.

Under present conditions no Real Danger of Uniformity.

The fear of an arbitrary uniformity is based more on the supposed analogy of primary education than on fact. No one will deny that the State *might*, if so minded, go far towards destroying healthy variety of method in schools dependent for their existence on State funds. But, under existing conditions in England, it would be virtually impossible to establish uniformity, even if any one were so utterly ill-advised as to desire it. So diverse are the Secondary Schools already existing, and so numerous are the kinds of schools absolutely necessary for our requirements, that any serious risk of excessive uniformity is a chimera of the imagination. The proposed inspection may be exercised not only by the State directly, but also by Universities and other educational bodies approved by the Board of Education—bodies which would be little likely to fall very closely into line with too despotic a Board. Local Authorities, moreover, are certain at no very remote date to receive considerable powers in connection with education, and the first effect of this would probably be in the direction

of variety, since each district would secure the maintenance of the type of schools best suited to its individual needs.

Inspection wanted at once. In the mean time the Bill does not provide any public money for Secondary Education, great though the need of such aid is, and it seems clear from the speech of the Duke of Devonshire, made in introducing the Bill, that a full staff of inspectors will not be appointed at once. There can be no objection to beginning slowly, provided that the most urgent needs are met at once, by appointing a small staff composed of persons recognised to be of the highest competence and possessing experience in this particular work. Such an inspectorate would begin by learning how best to inspect Secondary Schools, and would have, above all things, to win the confidence of the large public schools, and through them of the general public. It would initiate a new and appropriate system of school inspection, which would concern itself more with all-round efficiency than with uniformity; and would look for excellence to those influences which mould character no less than to those which culminate in high intellectual attainment. The effect, after the establishment of a sound tradition, would be such as to make it evident that no more important measure dealing with education has been before Parliament since 1870 than the Board of Education Bill.

Inspection should be offered to all Schools on Similar Terms.

When Local Authorities come to share in the administration of Secondary Education as they already share in that of Primary Education, various changes may take place which it is not necessary now to forecast. But in the present Bill there is one provision to which very strong objection should be taken—namely, the only method proposed for meeting the expenses of inspection: "any County or County Borough Council may, out of the funds available for technical education, defray, in whole or part, the cost of inspecting any school within their limits." Free inspection would thus be confined to the poorer schools and the newer unendowed institutions closely connected with county authorities, and this very fact would form these schools into a separate group, less subject to the best influences of, and perhaps out of sympathy with, the other secondary schools. It would be most undesirable, as has already been said, to impose uniformity on English Secondary Schools: it would be almost as great a calamity to cleave them into two groups with little or no connection between them.

Our present Secondary Schools are due partly to the generosity of founders and benefactors, partly to grants from the Local Taxation Customs and Excise, but especially and chiefly to the payments of parents. The State has a very direct interest and responsibility in the question, and the

least it can do is to secure that the education given is efficient and adequate. Unnecessary interference cannot be tolerated, and uniformity is the last thing that is wanted; but as a guarantee against incompetence cannot be secured without the intervention of the public authority, it ought not only so to be secured, but placed equally and fairly at the disposal of all schools and all parents in the country.

(17.) WHAT IS SECONDARY EDUCATION?

1. The Warning.

"IN England we have no regular system of Secondary Education," wrote the great Dr. Arnold of Rugby, so long ago as 1832. "Organise your secondary instruction," was the message which his son, Matthew Arnold, urged on his fellow-countrymen in 1859, and yet more vehemently in 1866. "It is not merely in the interest of the material prosperity and intellectual activity of the nation, but no less in that of its happiness and its moral strength, that the extension and reorganisation of Secondary Education seem entitled to a place among the first subjects with which social legislation ought to deal." These are the concluding words of the Report issued by the Royal Commissioners on Secondary Education in 1895. Thus, with increasing emphasis, has the need for the reform of Secondary Education been pressed on public opinion by those best acquainted with

the intellectual conditions under which what is best in English life and character will have to hold its own in the ever more intense competition between civilised nations.

2. But what does the Warning mean?

What is it, then, we are lacking in? What is meant by this "Secondary Education" which we are so earnestly recommended to develop and extend? It is not that England is destitute of Secondary Education. On the contrary, our best Secondary Schools for boys and girls—some public, others under private management—are the admiration of the civilised world. On certain sides of their work, and those the sides which are not only the most important in themselves, but precisely those which no mere Act of Parliament could ever by itself create or inspire, these higher English schools are more excellent than are their counterparts in any other country. Were it not so they could not have trained so many of the eminent and devoted men and women, who during the present century have upheld the honour of England in every sphere of intellectual and moral effort. What is wrong, then? it may well be asked. Two things, is the reply. There are not enough of these admirable schools, and they are not sufficiently accessible to the children of less wealthy parents. There are many schools which are too hard pressed by poverty or by lack of public sympathy and

support to reach the ideal of excellence which they acknowledge, but to which, as things are, they cannot attain.

3. The Five Branches of Education.

"Here comes the bore of all bores," says a character in one of Peacock's novels; "his subject has neither beginning, middle, nor end. It is Education." We must admit that there is something indeterminate in the popular notion of what Secondary Education means. The fact is that, though common usage quite rightly distinguishes between the five great categories of educational work—Primary, Secondary, University, Technical, and Professional—the boundaries between them are in certain places necessarily indistinct. The fundamental reason for this is that we in England stand for the noble ideal of keeping the entrance to every walk in life open, so far as may be, to the gifted children of all classes. And the second cause of the fluctuating character of the line which divides one department of education from another, is that, society being in a state of growth, there are always arising new needs for kinds of training previously unsupplied. Nevertheless, when all this is admitted to the full, each of the five great branches of Education serves a specific purpose. Each is separately necessary. Each has its own individual aim. And all five must be proportionably aid[illegible]d heartily co-operative in, the mode[illegible]

4. The Differentia of Secondary Education.

What, then, is Secondary Education? It is not the same as University Education, although the studies of the elder boys at the top of a great public school may be far in advance intellectually of much that is done by the ordinary "passman" in the first years of the latter's academic life. It is not the same as Technical Education, although the studies of some of the elder boys in a Secondary School may well take part of their colour, so to speak, from the employments which the boys are destined to enter. It is not the same as Professional Education, although one reason for retaining the admirably high standard of classical teaching in our great schools is to be found in the fact that a precise and comprehensive knowledge of the languages, history and literature of the two chief nations of antiquity will form an indispensable part of the professional equipment of some of the scholars. It is not the same as Primary Education, although Secondary Schools, or the establishments directly preparatory to them, will teach the elements of many subjects which are also taught in Primary Schools, and that for two reasons: first, because (though many clever boys and girls will make their way into Secondary Schools from the top of the Primary Schools) it is an admitted advantage for children, especially in the earliest years of their education, to be taught in very much smaller

classes than it is economically possible for the public Elementary School to provide; and secondly, because boys who are intended for the highest kinds of classical training are generally put to their Latin before they are ten years of age, and it would be impracticable to make Latin a prominent feature in the curriculum of an ordinary Elementary School. The Secondary School, if at all worthy of its name, must provide that course of liberal training which so shapes the mind and character as to prepare both alike to receive and profit by the more advanced teaching offered respectively by the University, by the higher Technical Institute, or by the Professional Schools. And experience has shown that such a training, though it may take many forms, and is by no means necessarily the outcome of any one particular curriculum, requires a long term of years for its accomplishment. Beginning at ten or earlier, it extends in its Lower grade to sixteen, and to eighteen or nineteen in its Higher. Thus, Primary and Secondary Education cannot be compared respectively to the lower and upper storeys of a single tenement. They are rather to be figured as two adjacent tenements, with an easy passage from near the top of the lower to the mezzanine floor of the higher of the two houses.

5. The Essential [illegible] Secondary [illegible]: (a) on the [illegible]al Side: Boys and girls, on leaving a [illegible]ssical Secondary [illegible] sixteen, should

be able to read, speak, write, and understand when spoken, two languages besides their own. On leaving, at sixteen, a Secondary School which teaches Latin as an essential part of its curriculum, they should possess, in addition to a sound knowledge of the elements of the Latin language and literature, the power of reading, writing, speaking, and understanding when spoken, one living tongue besides their own. Whether their Secondary School has thus been semi-classical or bare of classical teaching altogether, the pupils, on leaving it, should have the necessary basis of religious knowledge; they should be well grounded in arithmetic, algebra, and geometry; they should be well acquainted with the political and social significance of the history of their native land, and familiar with some of the chief masterpieces of English literature and of English art; by wise training in geography, in natural history, and in the elements of physics and of chemistry, they should have acquired accuracy and intelligence of observation, and some insight into methods of scientific reasoning; drawing, brushwork, and manual training should have practised them in the use of hand and eye; and physical culture and school games should have fitted them for the strain of life by means of the healthy exercise of bodily powers. But the supreme test of the excellence of this intellectual side of their education will be, not how much they actually know when they leave school, but how keen

and persistent is their desire always to be learning more after they have left school. Some kinds of instruction are like inoculation, the practical result being to *prevent* your having anything more to do in later life with the subject thus introduced. But the aim of true education is to make the pupil eager to learn more, not proof against any later accessions of intellectual interest. The object of a good Secondary School is not cram, but discipline.

and (*b*) on the Moral Side. Far more important, however, than the intellectual is the *ethical* purpose of a Secondary School. The aim of our English schools must be to produce, not tame experts or pigeon-holed specialists, but to co-operate with the pupils' homes in producing *doers*, men and women of high principle, vigorous in mind and body, ready for the varied calls of life and duty, alive to their responsibilities as parents and citizens, able to discern the deeper significance of apparently humble tasks, and of natural relationships, thinking it a greater thing to set a good example than to broach fine theories, and recognising moral agreement amid much intellectual difference. As a great [illegible]pher remarked, "Our brains are not the wi[illegible] of us." The Secondary School mus[illegible]in and sha[illegible] character, but the m[illegible] of the [illegible]aracter. And to [illegible] purp[illegible]h there are few

higher in the body politic, our Secondary teachers must be men and women of liberal culture, of practised skill, of wide sympathies, and, above all, of noble character. They must set clearly before them the aim of the Secondary School. And it is on their personality and example, operating on small classes, that the true influence of the school will depend.

(18.) HOW CAN SECONDARY SCHOOLS BE MADE AND KEPT EFFICIENT?

By F. STORR, B.A., *Chief Master of Modern Subjects, Merchant Taylors' School, E.C.*

1. Preliminary Survey needed.

IN Elementary Education we know to a unit the number of Board and Voluntary Schools in England, the accommodation they provide as reckoned in seats, the number of names on the books, and the average attendance. We know with equal exactitude what subjects children are taught, and we know, as far as the judgments of experts can be depended on, how they are taught, and with what results. With Secondary Education it is far otherwise. Up till last August, when the Education Department issued its first census of Secondary Schools,[1] the number of such schools was a matter of conjecture, and the estimates of the number of pupils in them differed as widely as those of geographers on the population of China.

[1] Return of the pupils in Public and Private Secondary and other Schools (not being Public Elementary or Technical Schools) in England on June 1, 1897. Command Paper C. 8634. June, 1898. 11*d*. Eyre and Spottiswoode.

2. Wanted—Sufficient Schools.

The Return[1] of the Education Department proved to the hilt, what had before been only a probable surmise, that our supply is defective in a marked degree, and that in proportion to the population comparatively few English boys and girls carry on their education after the age of fourteen, and in 1897, out of a population of 29,000,000 only 29,000 boys and girls over sixteen years of age were found to be in attendance at school. Sooner or later, and sooner rather than later, the supply must be increased, and the desert tracts in our scholastic map dotted with centres of civilisation. How this had best be done, whether by the central or by the country authority, whether by Treasury grants or by a voluntary or compulsory local rate, is a thorny question with which we are not now concerned.

3. Wanted—Efficient Teaching.

It is to another and less disputable aspect of the Return that we now wish to call attention. The Department was no discerner of persons, and all schools professing to give Secondary Education are included in its census, as well as many which made no such profession. It is obvious that such professions are no more trustworthy than the declarations of spinsters as to their age. We all know of academies for young gentlemen and

[1] See note, p. 172.

ladies' colleges where the instruction is primary, primitive, or none at all. We all know of private schools (and public schools to boot) where the buildings, accommodation, and plant are such as would not pass muster with the most lenient inspector of the poorest village school. And that the teaching in these schools is not all that might be desired we may partly gather from the Report itself. We there learn that only 55 per cent. of the regular male staff in the boys' schools included in the Return are of graduate rank, only 29 per cent. in the girls' schools, while the visiting staff is as a rule uncertificated. Even more damning than this is the fact that 32 per cent. of the boys' schools and 74 per cent. of the girls' schools have no graduate on the regular staff. Compare this state of things with France, where 90 per cent. of the teachers are *diplômés*, or with Germany, where no one may teach either in a public or private school without a Government certificate.

The point that the Duke of Devonshire has most insisted on in his two last speeches at Derby and Birmingham is that it behoves us first of all to ascertain what our present supply of schools is, then to co-ordinate and regulate that supply. Afterwards we may attempt to supplement deficiencies. In fact we are in the position of the Archdeacon with five unmarried daughters. "What a resource, Mr. Archdeacon," said a lady to him, "you must find your daughters to you in your old

age." "Yes, madam," was the reply, "but my difficulty is to know how to husband my resources."

4. Inspection the Remedy.

In our case *le mot de l'énigme*, the secret for husbanding our resources, lies in the one word *Inspection*. By the Board of Education Bill which the Duke promises us shall be reintroduced in the early part of 1899 the duty of the State as regards the inspection of *all* schools is for the first time recognised. In the Bill, as at present drafted, the Clause enacts that

"the Board of Education may, by their officers, visit, inspect, and examine any school, and give certificates in respect to the teaching therein, whether the school is subject to the Charitable Trusts Acts or the Endowed Schools Acts or not, provided that in the case of a school not so subject the power conferred by this sub-section shall be exercised only with the consent of the governing body of the school."

The clause, it will be observed, is tentative, permissive, and not universal, but it seems to us to concede the principle for which we are contending, viz. that the State is responsible for the efficiency of Secondary no less than of Primary Education. One obvious amendment must either appear in the new Bill or be moved in the House. For "may" read "shall." The Charity Commission *may* now inspect the Endowed Schools for which they are responsible, but their inspection is so occasional and spasmodic that it affords no

guide to the public. The Bill, moreover, leaves the inspection of private schools to the option of the governing body — that is, the proprietor. Whether the inspection of private schools should likewise be made compulsory is an arguable point. Doubtless the better sort will raise no objection, and the public will rightly infer that there is something shady about a school that declines to be inspected. On the other hand, we can see no just cause or impediment why private schools should not be subject to inspection, as they are in France or Germany; and, as was manifest at the last congress of the Teachers' Guild, private masters and mistresses are, as a body, prepared to welcome State inspection provided it is conducted by a staff appointed *ad hoc* and not by the present officials of Whitehall.

5. Register of Schools nd Teachers.

Inspection is the key of the position, but one corollary must be added · main proposition. From the statistics we ·+ appears that only a minority of our teachers have received a University ·v no one would maintain either elf is a sufficient credential the other hand, that none ch in Secon- maintained, claims the ary School

should be able to produce evidence both of adequate learning and of experience in teaching—that is, we need some special test to distinguish the teacher from the mere amateur. In other words, Parliament must deal with the long-delayed question of Teachers' Registration. The law forbids any man to describe himself as a doctor of medicine, or even to prescribe certain drugs, unless he possesses a professional diploma or degree. Why should the State show less care for the minds of children than it does for the bodies of adults? This is essentially a parents' question. Parents need some guarantee that the school to which they send their children is properly built, furnished, lighted, and ventilated, and, what is equally important, that it is conducted by men and women who have served their apprenticeship and learnt their business, not by those who casually adopt this profession as a last resource because they have not learnt any other, or because they have failed in other callings.

6. Inspection and Registration in the Board of Education Bill.

The Bill of 1899, so far from satisfying our anticipation, makes the inspection of *all* Secondary Schools voluntary, *i.e.* dependent on the consent of the Governing Body, and further allows University inspection as alternative to State inspection. The Duke of Devonshire, it is true, in introducing the Bill, stated that it was the intention of the Government to make

use of the powers conferred by the Bill to transfer to the Board of Education the inspectoral duties now exercised by the Charity Commission in regard to endowed schools; but apparently he was not aware that their functions, as defined by statute, are limited to the administrative side and do not include an educational inspection such as is contemplated in the Bill. It is to be hoped that the Bill before it passes into law will be amended so as to carry out what was clearly the intention of the Government that endowed Schools at any rate shall be subject to compulsory inspection in the fullest sense of the term whether it be conducted by the State or by the Universities.

There is much to be said for leaving the regulations for Registration to the Consultative Committee, as proposed by this year's Bill, but we must have more particulars as to the constitution of this Committee and be satisfied that in effect it reproduces the Registration Council of 1896, before we can approve this solution of the vexed question.

(19.) THE DESIRABILITY OF PRIVATE ENTERPRISE IN SECONDARY EDUCATION

(i). *By the* REV. F. R. BURROWS, *Principal of Ancaster House School, Bexhill.*

Private Schools must be affected by any State organisation of Education.

THE attention of the British public has been lately directed by the Duke of Devonshire to the organisation of the Secondary Education of the country, and we understand that a resolute attempt will be made to deal with the matter in the coming Session. The Duke and his advisers are contemplating a rearrangement of the Education Department and the constitution of new machinery to deal with all education other than that carried on in the primary or elementary schools familiar to us all as Board or Voluntary Schools. So great a revolution is bound to follow, that we owe no apology to our readers for drawing their attention to at least one result of the proposals fathered by the Duke of Devonshire. State organisation will place on trial

most private schools
Schools, even those
Amongst the scho
foundations and m
colleges and p
grammar schools,
schools which pr
level of those att
schools.

Questions at
of these things?
burden? Can
only control,
schools which
(perhaps as
element in
this last qu
not"—why
article to sh

**Individual er
past (*a*) in es
(*b*) in main
Secondary**

their ori
Royal o
of indi
founde
typica
traditi
resul

foundation by Archdeacon Johnson at Uppingham is seen in the school of to-day, and is writ large in Mr. Parkin's "Life of Edward Thring." And when the days of generous individual founders had passed, there followed the era of combined private enterprise, shown in such schools as Cheltenham, Marlborough, and Haileybury. Nearly all the smaller schools that have grown up to prepare boys for the larger schools were founded by private enterprise of individuals. The State would therefore be unwise, if not unjust, in taking no cognisance of the first fact in the history of most Secondary Schools, that these likewise originated in private enterprise.

Secondly, as to their maintenance and management in the past. It has certainly been true of most of the Secondary Schools that individual effort has kept them going. It can be shown that fortunes have been spent in numberless instances in carrying on the work, in improving the buildings, and in enlarging the playing-fields. Chapels, libraries, gymnasiums, stand as witnesses to the fact that money has not been spared by either those engaged in teaching or in governing Secondary Schools in Great Britain. And we are emphatically of opinion that in nine cases out of ten these vast improvements have not been wholly mercenary, but made in the true spirit of loyalty to the special school, and on the initiative of individuals whose hearts were in its work.

Private Schools characterised (*a*) by close personal relations between Teacher and Pupil, (*b*) by freedom of experiment.

In the third place, private enterprise brings in an immense factor in all educational work — the personal one. No details of a well-conducted private school should escape the eye of the head-master, and no temptation to enlarge numbers at the expense of efficiency should lead him to relinquish his sacred right to know at least something of every boy. It is true that parents perhaps think more of grand buildings and scholarship successes than of the character of the man to whom they commit their boys; but in the main they make very fair choice, and often make it after much inquiry. No real tie can bind boys and master together if official be substituted for personal relations, and the tendency of publicly-managed schools must be to lessen the personal and increase the official character of the relations.

In the fourth place, the necessary variety of Secondary Education forbids the carrying on of the work on hard-and-fast lines. Even in elementary education it is doubtful whether, without doing much harm to the children, we can order all the subjects to be of exactly such and such a kind and such a quantity; but that stage once passed, the dividing of the ways becomes necessary. Some children are intended for the great public schools, and for them—rightly or wrongly—certain [illegible]ts are required for which

preparation is necessary. Others, again, are meant to pass into commercial life, and, in framing the curriculum, this must be borne in mind. Many children are not fit for, or their parents do not wish them to go to, public schools, and for these the private schools provide what is wanted—individual care in a higher degree than is generally compatible with the public school system. In a sense, there is undoubtedly confusion in Secondary Education, but it is caused by the complicated conditions of what we may call middle and upper class child-life. These conditions will not be satisfactorily dealt with by building up any single system of universal Secondary Education.

Voluntaryism a characteristic of English methods of supply.

There is, perhaps, no need to point out that a nation which has hitherto existed with comfort and credit on voluntary methods in most of its professions should wish to reverse its procedure in one. The State has not denied the right to private individuals to invest their money in any way they choose. It can hardly now begin to declare that in investing in school premises a man is violating any part of the Constitution. It entrusts the care of our bodies in sickness and health to voluntary physicians and surgeons, whose work is done as well as if it were State-paid. Nor must we forget that in the highest of all work, that of religious teaching and example, the nation has gained far more from the

devotion of individuals than from any merely official action on the part of the State.

Efficiency the one great condition for State recognition of Schools and of Teachers.

We can sympathise with a wish on the part of our reformers to simplify the existing arrangements for Secondary Education, but we advise them to proceed on some such simple principle as this, which would eliminate all that is worthless and assist all that needs assistance. Let them classify all existing schools requiring efficiency in every department—in sanitation, in teaching staff, and in school work. They should prepare a register of teachers, and failing a certificate of efficiency from some public body of the work of the school, inspect for themselves. But the vast majority of English men and women will not expect Parliament to set up State-aided Secondary Schools to take the place of those which, founded for the most part by private enterprise, are maintained by it, and from which have gone out into the world many generations of boys and girls, for the most part capable of becoming good citizens. And, by way of personal application, be it remembered no mere "systematising" of education can guarantee success in life or insure us against the perils of mechanical routine.

(19.) THE DESIRABILITY OF PRIVATE ENTERPRISE IN SECONDARY EDUCATION

(ii.) *By* J. C. TARVER, M.A., *Clayesmore School, Enfield.*

To a foreigner England would appear to be the land of private schools, the State as yet having done nothing to regulate the status of teachers or to organise the system of education followed in any schools that were not called into being by the Elementary Education Act of 1870 or its successors, or by the Science and Art Department, or by the Technical Education Act. The whole of the higher education of the country is only approached by the State indirectly through examinations for the public services and professions. An exception might be claimed in the case of Endowed Schools, but even here the position of the State is rather that of a permanent trustee for the endowment intervening to prevent the diversion of funds bequeathed for a particular purpose, than that of an educational authority concerned with the whole system of education outside the region of the Acts above mentioned.

Distinction between Private and Proprietary Schools.

According to English conceptions, any individual is at liberty to open a school on his own responsibility, and to persuade parents to entrust their children to his care. At the same time Englishmen see a sharp distinction between a school for which the necessary capital is provided by a single individual—to whom the school belongs as a factory belongs to its owner—and a school for which the funds are found by a combination of individuals, such as a company with limited liability. In the latter case the school is credited with being a public school, and bearing a different character, as though an industrial concern owned by one man were essentially inferior to the same concern when it has been bought by a company; the English habit of mind being to assume that in this latter case the interests of the parent are being protected from the avarice of the proprietor, but the school is none the less a private school.

In the case of non-local schools, that is to say, of boarding schools, little exception is taken to the private proprietor; indeed, the extent to which schools called public are really proprietary is not commonly recognised. The capital for the boarding-houses at the large public schools is more commonly found by individual masters than by the corporate body which is supposed to be responsible for the school.

On the other hand, a local private school is ordinarily cavilled at as a thing necessarily inferior; nor would it be difficult, as things are arranged at present, to find statistics in support of this view.

Variety desired in School types.

It does not, however, follow, that because we have no system now, and our want of system has opened the way to inevitable abuses, that the local private proprietary school is necessarily an evil, or that it is impossible to imagine a state of affairs under which it would become a useful part of our system of education. It would be extremely undesirable so to organise Secondary Education that schools of a certain type only were permitted to exist in our expanding towns. It is, for instance, highly improbable that county boroughs will provide adequate playgrounds for their Secondary Schools, or due provision for the organisation of those games whose influence upon English boys wins the admiration of Continental teachers. The majority of ratepayers are not likely to countenance expenditure upon this very important department of school-life, or to permit such fees to be charged as would be necessary were its advantages recognised. In this case, and in many others, private enterprise would step in. Parents, finding the rate-aided schools incomplete, might combine to guarantee the expenses of such a school as met with their views;

a properly qualified individual might see the advisability of starting such a school on his own responsibility.

Inspection a Safeguard of efficiency.

Such schools might submit themselves to inspection, and otherwise prove their efficiency; not drawing any money from public funds, they would be at liberty to charge adequate fees; parents who could pay for what they wanted would have the opportunity of doing so. Their province would be to remedy the defects inseparable from the financial management of local education by a body of men elected by the local ratepayer, and in any case would supply an opportunity of escape from such a cast-iron system as might be imposed by an over-zealous minister of education. The defects of unregulated private schools are not inherent to the private school system; they are due to a general want of system applying to private and public schools alike; and if we consider how much has been done by private enterprise for education in England and Scotland, we must admit the imprudence of endeavouring to create a monopoly in the hands of the State, and of rendering private enterprise in the future practically impossible, except in the [illegible] boarding schools. As we [illegible] bigots who are in[illegible] the emergence

be anticipated. In regard to the relation of private Secondary Schools to the State, Englishmen might do worse than take a leaf out of the book of Denmark.

(19.) THE DESIRABILITY OF PRIVATE ENTERPRISE IN SECONDARY EDUCATION

(iii.) *By the* REV. J. O. BEVAN, *formerly President of the Private Schools Association.*

The beginnings of Educational Effort.

IN early days Education was mainly the possession of the Ecclesiastical order; consequently, the imparting of education was a prerogative of that Order. In due time, when the clash of arms permitted, princes and potentates were moved to foster or found seminaries or schools of learning; so that, long before the Reformation, Universities were in full swing, whilst colleges, such as Winchester, were established to supply them with *alumni;* moreover grammar schools were set up for the inculcation of free learning, as distinguished from a purely cloistered system. From various potent and well-known causes, the Reformation period witnessed a great advance in educational effort. Old things and institutions passed away—men with new ideas diverted the course of existing endowments and

were instrumental in the establishment of schools in all parts of the country, many being associated with the names of reigning monarchs—Edward, Mary, Elizabeth, and James.

Even at that time private effort was not wholly wanting. Witness the names of Colet, Lawrence Sheriff, John Lyon, Thomas Sutton, and John Carpenter—associated respectively with the foundation of St. Paul's, Rugby, Harrow, Charterhouse, and the City of London Schools.

Extension in Recent Times.

In respect of Secondary Education, but few instances of public beneficence can be recorded from the close of the sixteenth century until we come to our own time. What was done was effected by private effort and enterprise; partly by combination, through Councils or Companies—whereby we have the genesis of such schools as Clifton and Malvern, and of those associated with the Girls' Public Day School Company, the Church Schools' Company, and the Woodard Schools—but chiefly through the efforts, to which attention is more particularly called in this essay, put forth by individuals, who, unaided, embarked in the work of education, built or adapted premises to their use, and became the responsible heads and conductors of the establishments thus founded.

The number of private schools in England and Wales has not been accurately ascertained.

Unfortunately, the Royal Commission on Secondary Education was unable, through lack of time, to obtain precise information. The return recently published by the Education Department is good as far as it goes, and although it is admittedly defective on the one hand, and includes, on the other hand, many schools which are not Secondary in any true sense, its percentages may be assumed to state the case with tolerable precision. Using, then, the term Secondary Education somewhat roughly, and taking account only of establishments controlled by a single head, we may take it that private schools are 90·1, and the number of pupils 65·3, of the whole. The proportion of girls to boys is about as 65 : 35.

Of late years the utmost freedom has been permitted to any person who desired to start and carry on a school, to advertise his qualifications and to make known his pretensions—real or supposed.

Private schools generally have grown up with the growth of the nation, and of the institutions under which we live, and are in obedience to the requirements and exigencies of successive periods of national life.

A comparatively small, but relatively important, class of private establishments is furnished by those which prepare for the public schools. These are conducted by highly qualified men on highly successful lines.

Disadvantages attending Public Action and Control.

Public action usually lags behind expert, or even public, opinion, and cannot be brought into play unless some crisis supervenes to furnish the necessary momentum. It is, therefore, slow, halting, and conservative; liable to derive inspiration from the past rather than the present; to become fossilised and hide-bound, traditional rather than progressive; to look with suspicion upon those who try experiments, and "new-fangled" ways; to discourage displays of energy; to suffer matters to fall into a groove; to be unduly parsimonious at times, and, even so, wasteful at all times.[1]

In respect of education, popular activity has been complained of in the past as tending to the stereotyping of a system, to over-pressure in respect of the pupil, and to undue interference with the teacher in regard to time-tables and curricula. In Germany and France the consequences are even more serious, especially in girls' schools.

In the case of religious education, popular control has tended to bring about a compromise not fully satisfactory to any party.

The Advantages claimed for Private Enterprise.
(*a*) Economy.

It claims to relieve the State of responsibility and expense. An individual

[1] Witness the difficulties of many Technical Committees in dealing effectively with the "whisky" money.

can plant a school anywhere and everywhere, wheresoever there appear to be most need and best hope of return. He can vary the type, so as to provide education of every kind for every class of society. He can proceed tentatively; retiring, if necessary; advancing by proper degrees, if warranted so to do; spending as much or as little as he likes.

Then, by his action, the State is relieved of the necessity of making any outlay in land, building, or administration, and is suffered to enjoy full liberty to carry on its own peculiar functions of government, helping those who help themselves, and not doing for its citizens at large what they are prepared to show they can undertake with equal efficiency at less cost.

(*b*) Independence of the Teacher.

In the second place, it is asserted that the Principal is not hampered by hard-and-fast rules laid down by School or Charity Commissioners, or by public officials of any kind. He is not appointed, maintained, or controlled by a Council or Governing Body, but is solely and directly responsible to himself and his clients. With this independence are associated freedom, spontaneity of thought and [illegible] a quick initiative; a facile and speedy e[illegible] power to make and vary experiments, [illegible] discussion or interference f[illegible] ice of ill-informed busy[illegible]

tapeism, rigid uniformity, and old-world prejudice; but—on the contrary—flexibility, elasticity, and suitability to local wants; so that schools of this class have been found ever ready to institute reforms, and ever susceptible of improvement and adaptation to the increasing requirements of modern times.[1]

Moreover, it is asserted that the private teacher is brought into close, intimate, and confidential relations with parents and the public at large, so that he can readily find out their wants and their wishes.

If necessary, he is prepared to found small schools, to arrange for small classes, to provide a larger proportion of masters to scholars, and to exercise greater supervision and control over the members of his staff than is usual in public schools. Furthermore, he is led to bestow greater individual attention upon his scholars, to take special pains with the weak, delicate, timid, dull, idle, and backward, so as to bring to bear what is absolutely necessary in such cases—an incentive to effort and to formativeness of character. He is likewise enabled to satisfy the demand of parents for exclusiveness —rightly or wrongly expressed—so as to furnish the opportunity for a better choice of companions of the lads' own rank in life; for, since family life is more pronounced in private than in public schools, the

[1] *Vide* Dr. Wormell's Memorandum in the Report of the Royal Commissioners on Secondary Education.—Vol. v. p. 14.

choice of pupils is more select and restrictive. All this applies with greater force to girls than to boys, as is evidenced by the larger proportion of girls placed under private instruction. Herein they are more in touch with one another, being—as we have said—of the same social standing. Moreover, in such schools there is a freedom from overpressure, and a larger liberty in the pursuit of general culture and accomplishment.

Denominational Teaching.

A further claim is made that the teaching of religious truth is made definite and doctrinal; whereas in endowed and rate-aided institutions it is found that distinct religious teaching (from the parent's point of view), is difficult, if not impossible, to carry out.

Necessary Reforms and Restrictions.

The above statements must not be held to imply that the development of private enterprise which has hitherto prevailed should be permitted to continue unchecked. There are private schools and private schools, and the dangers and abuses to which the system is liable are but too well known to all investigators. Under the existing *régime*, s[illegible]—perhaps hundreds—of private teachers a[illegible]able; [illegible]cores—perhaps hundreds—of pri[illegible]ols [illegible]h that they should either be [illegible] or [illegible]

Where we [illegible]—such as Educati[illegible]ndent

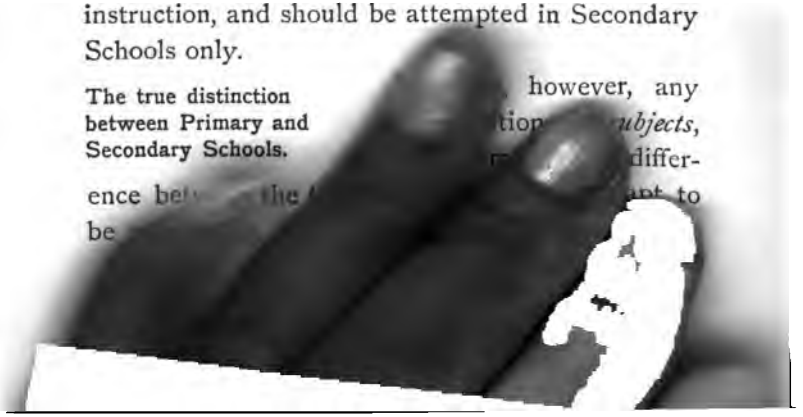
importance to the stability and well-being of the State, and of the Empire of the future—a subject, moreover, concerning the details of which parents, and the public at large, are either unable or unwilling to inform themselves—it is eminently desirable that a reform be carried through Parliament by enlightened public opinion with the least possible delay, whereby unfit and incompetent persons should be prevented from tampering with the minds of the children of the State, the citizens of the generations to come; whereby schools should be inspected by responsible authorities, to determine the efficiency of their sanitary and hygienic condition, the qualifications of the head, the adequacy and competency of the staff; and whereby also the knowledge of the pupils should be certified by properly constituted educational bodies in which, from long experience, confidence could be placed.

(20.) THE RELATIONS OF SECONDARY TO ELEMENTARY EDUCATION

(i.) *By* SIR JOSHUA FITCH,
formerly H.M. Chief Inspector of Training Colleges.

MUCH difficulty has been experienced by thinkers and public writers in reference to the definition of Primary and Secondary Education, and to the line of demarcation which separates the two provinces. Many persons are disposed to take the several subjects of school instruction, and to say, for example, that while reading, writing, and arithmetic, with the elements of geography, English grammar, and history and drawing belong to the domain of Elementary Education,—Latin, Greek, and the modern languages, mathematics, and physical science form the proper business of Secondary instruction, and should be attempted in Secondary Schools only.

The true distinction between Primary and Secondary Schools.



however, any tion *ubjects*, differ- ence be the ant to be

those two classes is founded on a consideration of the time which the scholar is likely to devote to his course of training. If he is to leave school at fourteen or earlier, the scheme of instruction should be limited to those studies which can be profitably pursued up to that age. If he is likely to remain until sixteen or seventeen, his range of study should be wider; and if he can stay at school till eighteen or nineteen, and so be prepared to enter one of the Universities, that range should be wider and more liberal still. The differences in the plan of the three classes of school—Primary, Lower Secondary, and Higher Secondary, depend entirely upon the probable duration of the course. They are not social or class differences. The term "middle class" applied to Secondary Schools is a misnomer. Of course it is inevitable that in the poorer ranks of the community scholars should be early withdrawn to become wage-earners, and that as you ascend in the social scale parents are better able and more willing to make sacrifices in order to give their children extended educational advantages. And in this way the three classes of schools are found to correspond roughly to different social grades. But this does not mean that a course of Primary instruction ought to satisfy the educational requirements of even the humblest member of society; or that it would not be a desirable thing to secure, if possible, a good course of Secondary

training for all persons engaged in manual industry, if they possessed the leisure and intelligence to avail themselves of it.

The Official limit to the work of a Public Elementary School.

This is the view which the Education Department has adopted, and which is held to justify the inclusion of a considerable number of alternative and "specific subjects" in the course of instruction prescribed for the higher classes in Elementary Schools. In the Official Instructions to H.M. Inspectors this passage occurs (Sec. 25):—

"It is not the intention of my Lords to encourage a pretentious or unreal pursuit of higher studies, or to encroach in any way on the province of secondary education. The course suited to an elementary school is practically determined by the limit of fourteen years of age, and may properly include whatever subjects can be effectively taught within that limit. It may be hoped that year by year a larger proportion of the children will remain in the elementary schools until the age of fourteen; and a scholar who has attended regularly and possesses fair ability may reasonably be expected to acquire in that time not only a serviceable knowledge of reading, writing, and arithmetic, of the words he uses, and of the world in which he lives, but also enough of the rudiments of two hi[illegible]bjects to furnish a solid foundation for future [illegible]ent. Teachers should not be satisfied unl[illegible]ruction in [illegible]c subjects awakens in t[illegible] desire f[illegible]now-ledge, and mak[illegible]g to av[illegible] such opportunities [illegible]ed loc[illegible]

School, a Science Class, a Polytechnic Institute, a course of University Extension lectures, a Free Library, or a Home Reading Circle."

There is here an official recognition of two principles:—(1) That it is not well for the scholar in a Primary School, however well taught in the ordinary elementary subjects, to leave at fourteen under the impression that his education is completed; and (2), that hence it is quite legitimate to include in his course the elements of one or two subjects—*e.g.* Latin, mathematics, French, or physics—which cannot be adequately treated except in an advanced school. There is nothing pretentious or superficial in such teaching, and nothing inconsistent with a wise and generous conception of the scope of an elementary school.

The Curriculum of the Secondary School.

Similar considerations should determine the curriculum of a secondary school of the lower grade. As a rule the subjects chosen should be those only which can be carried far enough before the age of seventeen to serve a real educational purpose. Greek, for instance, should be generally omitted. But the scheme of the instruction should be sufficiently elastic to provide the rudiments of one or more subjects which might be pursued hereafter, either by private reading or in a school of a yet higher rank.

Special function of the Higher Grade School.

The higher grade Board Schools which are now becoming so popular, especially in our larger towns, stand in an exceptional position. They are not, like the endowed Grammar Schools and the best private and proprietary establishments, Secondary Schools proper. But they carry forward the methods and the studies of a primary school to a point two years beyond the ordinary termination of the elementary course and on the same lines. They form no part of a ladder leading from the infant school to the Universities, and they aim rather at fitting the pupil to take a good position in the lower ranks of commerce and industry, than to qualify him for the learned professions.

Transfer of promising scholars from Lower to Advanced Schools.

This distinction points to a fundamental difference in the procedure which should be adopted when it is proposed to transfer a promising scholar from a primary school to one of an advanced character. If a boy's destination is towards the higher grade school, or to a Polytechnic or a Technical institute, and ultimately to a subordinate position in commercial or industrial life, he should remain in the primary school until he reaches the seventh standard, and until he shall have derived full advantage of a good elementary education. All else that lies before him is a further development of the same

general scheme of intellectual and practical discipline. There is no break in the continuity of his studies when he passes from the highest of the elementary standards to the special studies of the higher primary school.

But if the pupil desires to secure a really liberal course of instruction, such as will fit him for any one of the professions, and may ultimately lead him to the University, he should seek it in a properly equipped secondary school, which from the first aims at more extended literary culture, and has included among its earliest lessons regular discipline in language, mathematics, and science. But such a pupil should be discovered and taken from the elementary school much earlier, say, by the age of eleven, and placed at once in the "Grammar" or other Secondary school. It is essential that he should be influenced by the aims and the methods of such a school in good time. For him it is neither necessary nor desirable that he should complete the primary school course up to the age of fourteen, at which that course naturally terminates. If he did so, his whole scheme of instruction would be dislocated; he would not be ready to fit himself into the plans of teachers who had made the "humanities" or the formative studies from the first the staple of their teaching; and the transition to the care of such teachers would seem abrupt, and would prove unsatisfactory. There are few greater mistakes than to regard a good

secondary school as a proper "finishing" establishment for the last two years of a school life, which has been up to the fourteenth year spent at a public Elementary School.

Conditions which should be fulfilled in granting Exhibitions and Scholarships.

It would seem to follow from these considerations that exhibitions, scholarships, and other devices designed to encourage the most hopeful scholars in our Elementary Schools to continue their education should not all be awarded exactly on the same conditions or with the same objects. Those which are intended to help a boy or girl to enter the higher grade school or the Technical Institute should be given, only when the scholar produces evidence, either in the form of a leaving certificate or otherwise, of the satisfactory completion of the primary school course. Those which are meant to facilitate the admission of the scholar to a career for which a liberal education is specially appropriate should be offered, at the age of eleven or twelve, to scholars who had received, either at a public Elementary School or elsewhere, a good groundwork of general education suited to their age, and who thus are fitted to enter at once upon the more extended co[illegible] of instruction provided by a school of [illegible]ively secondary type.

But [illegible]rpose it [illegible]portant that the stan[illegible]ment t[illegible]d of Candidates fo[illegible]ps sho[illegible]dinary standard

which can be reached by a diligent scholar in the lower school at the prescribed age. It should not include any extraneous subject such as would render necessary the employment of a special "coach" or private tutor. For if this were permitted, richer parents might deprive others of the advantages which the Scholarship or Exhibition was meant to give. Equal opportunity should be offered to all scholars, whatever be their social rank, if they evince diligence and special ability; and it is quite easy to devise a fair test for the discovery of such scholars, without travelling beyond the ordinary curriculum of the schools in which they have been taught.

(20.) THE RELATIONS OF SECONDARY TO ELEMENTARY EDUCATION

(ii.) *By* H. L. WITHERS, M.A., *Principal of Borough Road Training College, Isleworth; formerly Assistant Master at Clifton College.*

Primary Schools must be affected by the organisation of Secondary Education.

WE are going to make a great venture in Education. Within the next few months will be decided, with momentous consequences to the future of the country, the way in which we are going to systematise and bring into businesslike working order the different institutions for higher education in England. The problem is hedged with difficulties, of which one of the thorniest is the relation of "Elementary" to "Secondary" Education. The plain citizen has a right to ask what makes this difficulty, how it came to arise, and what we are going to do to get over it.

The Education Act of 1870 has vastly improved Elementary Education.

The answer is, in summary, as follows. Ever since the Education Act of 1870 we have drawn nearer as a nation to the acceptance of two great propositions:

(i) That public authority must use *compulsion* to have all children taught a certain *minimum*, without which it is unsafe that they should grow up and live among their neighbours.

(ii) That, since the State makes schooling compulsory, it must also find the money to provide and maintain it, either in part or altogether.

In consequence of this tendency in national opinion, a system of public authorities with statutory powers, partly local, partly central, has been set up, a great machinery created, and a staff of inspectors and teachers, vastly larger than existed before, has been constituted.

Many mistakes in organisation were made at first; the experiment was on a huge scale, and a slight error in the calculations was enough to cause a great fault in the results. But, on the whole, every one, whose opinion is worth taking, is satisfied that enormous good has been done, and that the system thus created has effectively performed much of a great task.

Secondary Education is at present often neither efficient nor sufficient.

Meanwhile, nearly thirty years have gone by, and the attention of the country has been drawn to the striking confusion and aimlessness that mark our arrangements for higher education. It was shown by Matthew Arnold and others that, in comparison with Germany and France, our middle class was wretchedly ill-supplied with efficient schools for the teaching of modern

languages, history, geography, and natural science, and for that all-round training in method and general information that is indispensable for the conduct of our complex international commerce. Alertness of mind, wide knowledge, or, at least, readiness in finding a way to the knowledge required, linguistic quickness, businesslike method, these, together with the all-important elements of trustworthiness, energy, and loyalty of character, are the qualities upon which the future vitality of the nation must depend. As matters stand now, English parents too often find either that there are no higher schools at all in their own district for their boys, or that the character of the work in them is such that the sooner a boy is taken out and put to business the more likely he is to get on in the world. But this can't go on. We are too heavily handicapped in the race; our candidates enter the course *untrained* against the champions of France and Germany.

The Relations of Secondary to Primary Education are hard to define, but need systematising.

We mean, therefore, to organise our Secondary Education. But what of its relation to Elementary? The question can perhaps hardly be answered in the abstract satisfactorily. Once put the whole of English schooling under a central administrative authority, with county authorities to secure sufficient "play" and elasticity in the machinery, [illegible] the different institutions for

teaching will quickly settle down into their right places. It is of no use, and it might do great harm, to attempt to draw too hard and fast a line, to seek to wall off primary instruction into a backyard of its own, and to raise social and educational barriers between classes already too much divided one from another. But certain points are clear enough. We shall want the very best men we can get to do the work all through. We shall want to use the experience gained in the last thirty years in Elementary Schools, and to avoid repeating the mistakes.

Many of the defects of Primary Education are due to removable causes.

Elementary Schools have many excellences, but also many grave defects. The pupil-teacher system has left the teachers only partly educated. The excessive size of the classes has rendered necessary a mode of instruction which is often mechanical, and gives little scope to the individuality of the pupils. The same defect, combined with the extreme roughness of much of the material that has to be taken into the schools, has made it difficult to give an effective training in habits of courtesy, self-discipline, and consideration for others. Until quite recently the central control of Whitehall has been absurdly rigid and uniform; and as little encouragement has been given to the individual school as to the individual child to develop a mind and character of its own. Happily all this is

gradually changing under the new policy of the Education Department. The local authorities have been elected from much too small an area in many cases, with the result that men without social position or social experience have been elected upon the Boards, have often behaved without tact, and have brought about those unseemly squabbles between teachers and managers that have been such a grave scandal to Elementary Education.

The administration of Primary Education not to be stereotyped for use in Secondary Education.

It is a patent fact that neither the methods of the Central Department, nor the system of local authorities, nor the organisation and staffing of schools have been so successful in Elementary Education that the problem can be solved by simply grafting Secondary Education upon it. We shall have to make in many ways a fresh start, and seek to attain a higher efficiency with less friction.

The existing system of Elementary Schools will no doubt continue to exist upon somewhat the same lines as at present, except that School Board areas will be, let us hope, enlarged, and that other means than that of the already decaying apprenticeship will have to be found for the supply of teachers. The curriculum and mode of teaching will bear plenty of [illegible]uling and correction, but this will follow [illegible] from a more liberal central authority, s[illegible] bodies, and more highly educated [illegible]

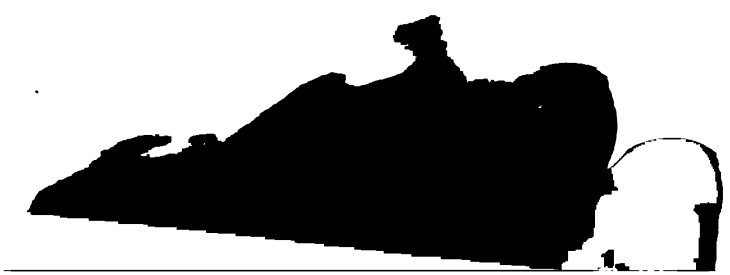
Primary Education is a whole in itself, and though linked by Scholarships to Secondary, is not merely preparatory for it.

It will be a grave mistake if it is supposed that Elementary Schools will have to be organised as *preparatory* to a course in Secondary Schools. The vast majority of the children in the Elementary Schools will continue for some time to come to take only that amount of schooling which the law makes obligatory, and no more, unless the State is to maintain as well as to educate them. Except, therefore, for a certain amount of instruction in Evening Schools and Technical Institutes, their training in the Elementary School will be the only systematic general education they will receive, and must be schemed accordingly. The Elementary School is not a lower story leading to a higher, it is in its way a house complete in itself, but with exits into other buildings for children of exceptional ability. These exits, by way of scholarships, should be taken advantage of as early as possible by those who are to remain longer in school than their comrades.

The right relations will work themselves out under an enlightened Central Authority.

Our general conclusion, then, is that "delimitation" will come of itself in a businesslike and practical way when once all Education is brought within the view of a single national authority. We shall only do harm by attempting abstract

definitions and erecting artificial barriers when there are only too many such in the nature of things themselves. We shall want to use every force available to us: the professional training and practical skill of those who have made their mark in Elementary Education, the wide knowledge and the liberal outlook of the most highly cultivated men in the country. Every means must be taken to keep communication open between different types of schools and to prevent anything like a caste system as between teachers or pupils, while at the same time the efficiency of the several types must not be sacrificed to the fiction of a complete continuity between them.



(20.) THE RELATIONS OF SECONDARY TO ELEMENTARY EDUCATION

(iii.) *By* MISS MARY H. PAGE, *Head Mistress of the Skinners' School for Girls, Stamford Hill.*

Conditions of Girls' Education— i. in the U. S. A.

IN considering the relations between Primary and Secondary Education for girls, as likely to be affected by the organisation of Secondary Education, it is necessary to review, and to try, if possible, to realise, the conditions in existence at the present time. This effort may perhaps be aided by a comparison of the conditions of education in the United States of America with those of England.

In the United States the Educational Curriculum is planned for the nation as a whole, and is so arranged that each year's course of study is definite, is known as a "Grade," and is presumably attended by *all* children in the community.

The Primary Grades distinctly lead into the Grammar or Intermediate Grades, and to nowhere else, and the Intermediate Grades lead into the

Higher Grades or Forms, while these last lead into the High Schools of the nation.

It is, therefore, evident that there can be no subject needed in the entrance examination to the High School that has not been taught in the highest Grade or Form below, and, on the other hand, that there is no need for provision to be made in the High Schools for pupils who need rudimentary education in arithmetic, grammar, reading, spelling, and other subjects taught in the Graded Schools.

ii. in England.

Here lies one secret of the great difference in the curriculum and organisation of an English High School as compared with that of a High School in the States.

In England the so-called High School is not an organic part of a national system of education, dealing only with the more advanced parts of school studies; but each High School has to adapt itself to the circumstances of the locality in which it is placed; and as no common scheme provided for the earlier years of school life is accepted for all children in a locality, the High School is necessarily driven to provide rudimentary education in order to fit its pupils to receive the advanced teaching offered in its higher Forms; but, in giving this rudimentary education, it does not confine itself to the subjects taught in a Primary School; hence the practical difficulties

of transferring girls from one kind of school to another, unless at quite an early age. For example, an average girl of twelve years in a Primary School would be in Standard VI., in a Secondary School in Form 3 or Lower 3; the subjects taught to each would, roughly speaking, be as shown in the following table:—

SECONDARY SCHOOL EQUIVALENTS TO "STANDARD" OF PRIMARY SCHOOLS.

X Obligatory subjects in the Primary School—fully taught, and on which much time is spent.
O Optional subjects, taken by classes throughout the Primary School, and of which *only two* are taken.
Over sixteen years' experience has shown that, *as a rule*, girls take, as optional subjects, class needlework and geography or elementary science.
T Optional subjects taken by individual children in the upper classes of the Primary School.

Subjects expected in Form III. or Lower III. of a Secondary School.	**Subjects expected in Standard VI. in a Primary School.**
ARITHMETIC. X	
Common fractions with, perhaps, elementary decimals.	Fractions, vulgar and decimal: simple proportion, and calculation of simple interest.
COMPOSITION. X	
Much the same in both.	
DRAWING. X or O	
Much the same in both.	
NEEDLEWORK. X	
Much the same in both.	
NEEDLEWORK. O	
A fair amount of skill in the easier stitches, such as hemming, sewing, herringboning, stitching, and plain knitting.	Advanced: including patching, darning, and cutting out garments.

Subjects expected in Form III. or Lower III. of a Secondary School—*contd.*	Subjects expected in Standard VI. in a Primary School—*contd.*
GRAMMAR. O	
A fair knowledge of parsing and analysis.	Often *nil.*
GEOGRAPHY. O	
Never omitted.	Sometimes taken.
When taken in Primary School, standard about the same in both kinds of school.	
HISTORY. O	
An elementary knowledge of the leading facts of English History, taught frequently through biographies. Dates of accession, and other important dates.	Generally *nil*, except as taught through Readers and in composition lessons.
DOMESTIC ECONOMY. O	
Generally not attempted; but, if attempted, of a very elementary character.	Food, its preparation and culinary treatment generally. The dwelling: warming, ventilation, cleaning.
ALGEBRA AND GEOMETRY. T	
Grounding in the elementary portions of the work.	*Nil*, with rare exceptions.
FRENCH. T	
A fair knowledge of the elementary grammar rules and of the four regular conjugations; easy translation from French into English.	Generally *nil.*
GE[illegible] T	
Grounding in the [illegible] [illegible]age.	

Subjects expected in Form III. or Lower III. of a Secondary School—*contd.*	Subjects expected in Standard VI. in a Primary School—*contd.*
SCIENCE. T	
Usually some; not infrequently the groundwork of elementary experimental science.	*Elementary Science.* (Usually taken when geography is not taken.) *Botany.* (Occasionally taken in preference to Domestic Economy.
DOMESTIC SCIENCE. T	
Generally *nil.*	Measurements of weight and size (volume), preferably in the metric system. Measurement of heaviness or density of water, milk, etc. Floating bodies—the lactometer. General effects of heat on matter in its three states, with applications to cooking, boiling, ventilation, hot water supply, steaming, freezing, clinical and household thermometers, weight of air, moisture in air, drying and airing clothes, weather forecast, distillation, solution, and solubility; modes of heating the dwelling, transmission of heat, clothing.
LAUNDRY. T	
Nil.	

Difficulties of Transfer from Primary to Secondary School.

From even a cursory perusal of the above table it will be seen that the

girl of twelve educated in an Elementary School will, in some subjects, have done more work than the one educated in a Secondary School; but, on the other hand, that there will be a rather large proportion of subjects of which the former may know little or nothing, and in which the latter will have had a good start and a good grounding.

Hence in being transferred from an Elementary to a Secondary School, the pupil in question is placed at a great disadvantage: either she must be put into a Form with children below her in age and, therefore, in general power, and very much below her in the subjects in which she is strong, or she must try to work in a Form where in some subjects she will be far behind her fellow-workers. In the latter case "coaching" in the subjects of which she knows nothing must be resorted to; but "coaching" is not, and cannot be, good grounding; it is not "education;" it is, at best, a necessary evil arising from the difficulties of the situation.

Another difficulty, and one that must not be overlooked, especially in connection with girls, is the fact that their future occupations cannot be foretold even on broad lines.

Girls, whether educated in Primary or Secondary Schools, may have to lead distinctly home lives, becoming wives and mothers, or they may, like boys, have to become wage-earners in the great business world of competition.

If in the Elementary Schools it is found desirable

—as we assume it is from the regulations of the Code and the practice in schools—to spend much time in needlework and domestic sciences, so as to fit girls under 14 years of age for their home duties while they may also be wage-earners, it does not, therefore, follow that this large portion of time would be wisely spent in the same way by girls who may not become wage-earners until they are 17 or 18 years of age; still less would it be wisely so spent by those whose parents can send their daughters to the University, and afterwards give them full training in housewifery duties.

Secondary not mere "top" to Primary Schools.

The recognition of these difficulties will lay bare the underlying principles between which choice must be made in the organisation of a Secondary Education, viz. whether Secondary Education shall be a mere "top" to Primary, or whether it shall be an organisation parallel with Primary, and having connecting links.

If the former, then the whole curriculum of Secondary Schools must be altered in order to make it fit on to the work already being done in the Primary Schools.

This manifestly would be unjust to those girls whose parents are willing and able to pay for the benefits arising from having a wider education from their early years, an education in which they assimilate slowly, but steadily, year by year, the various kinds of mental food by which all their

mental powers can be mos
the Secondary Schools
of which, it has been sa
their equal, must lose th
of training which is best
will have to be wage-
is clearly not the kir
the best work in t
Schools.

In reference to s
Primary and Seco
than supplementa
and said that it
than refer to the s

Much sound
"Standards" in
supplemented b
girls in the St
for one or mo
training in a
rather than
number of s
of girls ma
advance;
definite a
along its
overlapp
and whi
itself, b
have o

Summary.

In any solution of these difficulties, "freedom, variety, and elasticity" must be carefully maintained, and great care must be taken so to organise as not to hedge off any system of schools, or make it impossible for scholars to pass from one kind of school to another: but such transitions, whether from Primary Schools to Grammar Schools, or from Grammar Schools to High Schools, must be made sufficiently early in the school course to allow of full benefits being derived from the transitions.

In organising, the various needs of the various sections of the community must be remembered, and education so provided and arranged that all may have the opportunity of obtaining training suited to their capacities and to the circumstances of their lives.

But the attainment of such an end seems impossible unless there is to be a strong Central Authority having the power to collate experiences, to avoid overlapping, and therefore prevent waste and rivalry — a Central Authority that, with broad principles, will guide the local authorities, to whom in the future so much of Secondary Education must be entrusted.

employment, or to engage in mercantile, scientific, or professional pursuits, whether directly or by way of University or Technical Colleges, or by entrance upon a University course.

(*d*) That children who are compelled by circumstances to leave school to earn a wage at or before the age of 14 should, especially after the age of 11, follow a curriculum which bears some direct relation to manual and to industrial employments.

4. That this differentiation can only be satisfactorily accomplished by a Central Education Council, which shall include persons familiar with the administrative and internal conditions of both Primary and Secondary Schools.

5. That in considering the aims of Primary and Secondary Schools such Council would recognise—

(*a*) That both Primary and Secondary Schools have, in common, as their supreme aim, to train up, as well as the conditions will allow, good men and women and good citizens; and that while not ignoring the necessity of providing a store of useful information they both aim at training and developing the mental powers, and at preparing their pupils for their work in life.

(*b*) That the differentiation of these Schools is and should be recognised in the aims of the Schools and the character of the education, which in Primary Schools must, by force of circumstances, give a high place to immediate utility, while in

Secondary Schools immediate utility should be subordinated to the better securing of the well-trained and open mind, traditionally recognised as the outcome of a liberal education, whether on classical or on non-classical lines.

(*c*) That a School giving an education above the elementary standard is not necessarily a Secondary School; that a Secondary School is a School wherein the character of the education given is that which aims at the development of a broad and well-trained mind, rather than at the development of aptitude in some specific direction, and which can only be imparted under conditions of teaching staff and general efficiency consistent with liberal culture.

6. That inasmuch as the realisation of these aims depends mainly on the qualifications of the school teachers engaged in the work, it is essential that the Central Education Council should have charge of the registration of Teachers.

7. That School Boards, by providing Schools known as Higher Grade Schools, have rendered a national service in extending the school-age of many pupils attending Public Elementary Schools; and that Schools of this kind, when organised after types allowed by the Central Authority, should be officially recognised by that Authority, and should be aided by means of adequate Grants assigned for the purpose.

8. That it is of national importance that pupils

likely to benefit by Secondary Education should be passed on to Secondary Schools at an early age by an adequate provision and arrangement of scholarships, local or otherwise, such arrangement being recognised and supervised by the Central Authority; and that similar arrangements be made in due proportion, in regard to the Higher Grade, or Higher Primary, Schools.

9. That the cost per head of Secondary Education, owing to the smaller classes, the more highly qualified teachers necessitated by its aim, and in certain subjects the cost of apparatus, must exceed that of Primary Education, just as the cost per head in Higher Grade, or Higher Primary, Schools must exceed that in the ordinary Elementary Schools.

Administrative Differentiation of Primary and Secondary Schools.

1. For the purpose of the complete organisation of a National System of Education, just as Secondary Schools are divided into those at which the normal leaving-age is 16 (or 17), and those whose leaving-age is 19 (or 18), so the Primary School system should be divided into—

(*a*) Elementary Schools, and

(*b*) Higher Grade, or Higher Primary, Schools.

i. Elementary Schools to have Standards with an authorised syllabus graded in certain other subjects, as well as in Reading, Writing, and Arithmetic, such syllabus to be suitable to a

curriculum planned to terminate at the age of 13 or 14.

ii. Higher Grade, or Higher Primary, Schools to include—

(*a*) A Junior or preparatory portion, beginning as a rule not earlier than Standard IV.; existing or exceptional cases being allowed, on approval of Central Authority; and

(β) A Senior, or Higher, portion, beginning as a rule after Standard VI., and consisting of one or more sections, each with a methodical course of three, or of four years, such as a Science course on the general lines of the regulations for Schools of Science, or such other course, or courses, as may be sanctioned by the Central Authority.

The courses in the Higher Grade, or Higher Primary, School, will not differ necessarily in regard to the subjects taught from those in some Secondary Schools; the differentiation between the Schools being made by their respective aims and curricula, as also by those broad conditions of School life which lie outside the class-room.

In those rural districts where such Higher Primary Schools cannot be established, continuation courses should be attached to selected Primary Schools chosen in each case to serve a recognised area.

2. As it is important that pupils who leave the Elementary Schools either for the Higher Grade, or Higher Primary, School or for the Secondary

School should enter their new school as early as may be suitable, it is desirable that the Local Authorities should offer scholarships, inclusive, in certain cases, of maintenance, of two kinds—viz. Higher Grade or Higher Primary, and Secondary, in fixed proportions, fixed to meet local conditions, the former being always in considerable majority —such scholarships to be awarded at the same time, and under the same general conditions among pupils who have completed Standard V. and have not passed their twelfth birthday; but arrangements should also be made to meet special cases of boys or girls between the ages of 12 and 14, according to local requirements, with the sanction of the Central Authority. These scholarships should extend over a sufficient number of years, so as to enable the holder to complete the curriculum of the school selected, and thus secure a proper benefit from the course of education.

A pupil in an Elementary School (including the Preparatory Department of the Higher Grade, or Higher Primary, School) on the completion of Standard V., would thus have three options—

(*a*) Of remaining in the Elementary School, or the Preparatory Department of the Higher Grade, or Higher Primary, School.

(*b*) O[illegible]sing to the Higher [illegible]ade, or Higher Prima[illegible] to complete [illegible]s' curriculum by m[illegible] Scholarshi[illegible]e.

([illegible]sing to a[illegible] School for at

least a six years' course, by means of Scholarship or otherwise.

3. The Higher Grade, or Higher Primary, Schools, as being the completion of the Primary system, should, as a rule, be free, and the pupils should be required to pass a reasonable qualifying test for entrance into the portion above the Preparatory Department, determined by the Central Authority; when not free, a fair proportion of "free admission" Scholarships should be provided.

4. Secondary Schools should provide curricula adapted to professional, scientific, mercantile, and higher industrial requirements, or those of the Universities or the Public Services, and planned to terminate at the ages of 17 or 19. The junior [or preparatory] section of a Secondary School should have a curriculum comprising the normal subjects of Primary Education, together with subjects suitable to the aim of the Secondary School in question, and the complete classification of the school should be such that scholars from the top Standards of the Elementary School may be able, with reasonable diligence, in a short time to take up the ordinary work of a Secondary School.

5. Inasmuch as the existing arrangements for teaching boys below the age of ten, who are not in preparatory departments of Public Secondary Schools, or in Public Elementary Schools, are exceedingly defective, it would seem desirable that

private preparatory schools should be subject to some kind of test or inspection.

W. DYCHE, *Higher Board School, Halifax.*
J. THORNTON, *Higher Grade School, Bolton.*
D. FORSYTH, *Central Higher Grade School, Leeds.*
J. WAUGH, *Higher Grade School, Cardiff.*
W. H. KEELING, *Bradford Grammar School.*
R. P. SCOTT, *Parmiter's School, Victoria Park, London.*
R. D. SWALLOW, *Chigwell School, Essex.*
JAMES WENT, *Wyggeston Schools, Leicester.*

November 18, 1897.

The above JOINT MEMORANDUM was adopted at the Annual General Meeting of each Association next following the Conference.

Signed on behalf of the Association of Head Masters of Higher Grade Schools and Schools of Science.

JAMES WAUGH, *President.*
W. DYCHE, *Honorary Secretary.*

November 19, 1897.

Signed on behalf of the Incorporated Association of Head Masters.

A. R. VARDY, *President.*
R. P. SCOTT, } *Honorary Secretaries.*
R. D. [illegible]LLOW, }

January 14, [illegible]

(21.) THE RELATIONS OF SECONDARY TO TECHNICAL EDUCATION.

By C. H. DRAPER, D.Sc., *Principal of the Municipal School of Science and Technology, Brighton.*

Organise!

THE educational systems of England have grown up irregularly, and the relations of the different kinds of schools to each other are, unfortunately, less often the object of dispassionate study than the occasion of vehement denunciation on the part of advocates of one or other of the interests involved.

There are in this country several hundreds of Secondary and Technical Schools; but, having no administrative organic connection, they may be compared to an emergency crew in which each sailor acts on his own account—a method which is not found very effective in times of stress. Means of co-operation must be found, for in the long run, on anything approaching equal terms, the highest organisation wins, whether it be an animal, a football team, a business, or an army.

The English habit of providing for needs only

as they become urgent, and the national distrust of theoretical completeness, have led, at the present time, as regards education, to a plethora of administrative machinery working with a paucity of guiding principle.

School Boards have entered the region of Secondary and Technical Education, and pursue their way independently of the County and Borough Councils, who have certain powers within this area, while the Endowed Secondary Schools working under schemes of the Charity Commission, and Private Schools dependent only on local opinion, contribute their unorganised quota to a confused though lively whole.

Before the administrative tangle can be put straight, it is necessary that there should be a wider diffusion of correct ideas as to first principles.

Common Ideals.

All education has for its primary aim the development of the best types of human being, but in the twentieth century with the proviso that the best must be a useful being. Hitherto there has been too much tendency to cultivate merely in order to display the product. As the blue rose is only to be gazed at, so the man of culture has often shown a tendency to preserve himself from the world, rather than to spend himself for the world. The athlete in whom physical culture has been carried to a high point disdains to employ his suppleness and strength in useful work; the mental athlete

to whom we give scholarships and fellowships has too often in the past confined his powers to the exercises by which he has acquired some degree of fame. Probably the indifference felt by the average Englishman for the subject of education may be due largely to the unpractical educational ideals of former days. The great world does not care about geniuses who content themselves with solving partial differential equations. The country needs a class of men whose powers, having been cultivated to the highest extent, will then be applied to the ordinary affairs of life. It is certain that the practical genius of the English people will insist on the schools attempting to supply this need.

The Technical Schools are a frank recognition of this demand. They regard education as a means, not an end, and the modern Secondary Schools spoken of in this paper are their natural allies.

Aims Defined.

In the coming century, then, the modern Secondary Schools and the Technical Schools pursuing the culture of the utilities will set themselves the task of educating not the select few, but the mass of men and women who lead busy lives and require a useful education to help them to do so to the best effect. And here at the threshold lies a danger. The interpretation placed on the word "useful" must be wide and generous. The

Englishman has a great dread of learning too much, and likes to make a little go a long way; hence, when he sees that he can earn a satisfactory livelihood by showing great skill in a small area, he is disinclined to widen his range of knowledge. But, as a great writer has said, "The machine unmans the user: what the man gains in making cloth he loses in general power; there should be temperance in making cloth as well as in eating." And, moreover, change of fashion or the progress of discovery may any day render obsolete the process of which the narrow specialist is a master, and may render his skill valueless.

A certain breadth of range must therefore be insisted on, and it will be the business of the Secondary School to maintain this principle. The Secondary School will regard itself as the factory of general power—moral, mental, and physical; it will keep clearly in view the fact that the man is greater than his occupation. Remembering that "though sheep eat grass, it is not grass but wool that grows upon their backs," the Secondary School will avoid special diets in the hope of producing special products: there must be nothing specialised in the Secondary School. It will, as far as possible, bring his mind into relations with the best thoughts of the best of our race, and endeavour to waken in him a resp[illegible] what he finds there. It will aim at ha[illegible] o that ha[illegible] ch is second nature [illegible] of rea[illegible] tuality, and

reliability, of truthfulness, of industry, and of that rational obedience which is compatible with a vigorous individuality of thought and action; it will teach the boy the control and use of his own faculties, developing his power of observation, raising his standard of accuracy, teaching him how to think, how to learn, how to arrange his knowledge, how to express his thoughts in adequate language, and how to concentrate his attention at will on any given object. It will also teach him how to use his fingers, and will train his muscles at the same time that it strengthens his character and feeds his mind.

To do this requires variety of exercise, a careful selection of school subjects, and excellent teachers. Modern subjects can be made to furnish the necessary training, if judiciously chosen and well taught. *What* is taught is of great importance, *how* it is taught is no less so. When our Secondary Schools are raised to the proper standard, when each subject receives that care and superlative attention to method and finish which make first-class work of any kind, the desired result will be attained.

The curriculum must not be narrow. For example, a certain training of the eye is gained by practice at cricket, by drawing, by woodwork, by physical measurements, and in many other ways, but each result is apt to be confined within the narrow limits that produced it, so that a keen scientific observer need not be a good cricketer,

and so on. A special culture remains a special culture, and experience tends to show that for the highest development, even of special culture, it must be superposed upon general culture.

Special culture is the function of the Technical School. This school will endeavour to focus and apply the trained faculties of the pupils to some particular department, and to increase their activity within some limited range; it will give a bias to the training, and yoke the powers to some more definite task. No school can make an expert or a specialist, but a training such as that indicated can lay the foundation. If it is required to turn out an electrical engineer, you want first of all as well-educated a person as possible; you then proceed to make him an engineer; then to the general engineering you add the special application to electricity. The Secondary School does as much as it can towards the first of these, the Technical School does something towards the second and third, and experience in the world completes the process. It is the part of the Technical School to endeavour to give to the engineer, the builder, the farmer, the merchant whatever special training it is capable of giving them, but this can only be effectively done after the Secondary School has prepared the [illegible]

Lines of D[illegible] From what has been said it is [illegible] that, on the whole [illegible] Educati[illegible] [illegible]gher type at

least, is supplementary to Secondary Education.

There may probably be developed a type of Technical Education which is supplementary to Primary Education, but the discussion of this hardly comes within the limits here assigned. And in any case, up to the time when the future occupation of a boy is settled and begins to loom large in front of him, he should continue his general education only.

The age at which this occurs will obviously vary according to the social position of the parents ; but the general opinion that up to the age of about fourteen the Technical School has no *raison d'être* must be endorsed, and only social necessity would place the age so low. But many people will, for some time, regard that age or thereabouts as the period when boys should begin to think of their future occupation. The Technical School and the Secondary School may thus both have a division consisting of boys from fourteen to sixteen years of age ; but the curricula will be differentiated by the principles above set forth. Science, manual work, and such arts as typewriting and shorthand will form the staple of the Junior Technical School, while the ordinary subjects of a liberal education are being pursued in the upper division of the Secondary School.

Where parents are able and willing to continue the general education of their children to sixteen

or seventeen, the Technical School will receive them in a state which will enable it to take a higher flight.

In small towns which are not able to support a separate Technical School it will be necessary to attach a technical department as an adjunct to the Secondary School. In this case care must be taken that the Secondary School may preserve its ideals and curriculum intact; the technical adjunct should form a separate department, and the classes should be taught by specialists. There is considerable danger in regarding it as a natural or necessary part of the duties of a master in a Secondary School that he should also teach evening classes in technical subjects. We need good teachers, not grant-earning hacks. And to be a really competent teacher in any group of subjects a man must have leisure for private study. Where a "Higher Grade" School exists as well as an ordinary Secondary School, the former might play the part of the Junior Technical School. The advanced technical work is so complicated and expensive that it can only be carried on in centralised institutions on a large scale, to which easy means of access should be provided.

As to administrative demarcation, it is clear that if cross-currents are to be avoided, both classes of school should be under one authority, and this authority should be so constituted as to ensure that neither type of school shall be sacrificed to

the other. The question of the exact line of separation in any particular locality is one which can only be properly decided by persons possessing knowledge of the needs of the locality and of the existing provision for those needs. It is quite possible that some of the work that would be properly done by the Secondary School in Manchester should be done by the Technical School in such a town as Salisbury or Exeter. The varying depth and area of specialisation in the work of a district will cause the line separating "special" from "general" to be drawn in different places. But this is only a question of degree, which, if the Central Education Authority will enforce the observance of correct general principles, may safely be left to the local authorities.

(22.) THE RELATIONS OF COMMERCIAL TO SECONDARY EDUCATION

By D. HOWARD, F.C.S., F.I.C., *Vice-President of the London Chamber of Commerce.*

The requirements of Commercial Life not fully realised by the Teacher.

THE chief difficulty of studying the relation of Secondary to Commercial Education is that the only people who really know what is wanted in commercial life are busy men of business who cannot, or will not, analyse what training is needed to obtain their requirements. They know if a partner, or manager, or clerk does good or bad work, but often they have very little idea as to the causes which led to good work being done in the one case, and to bad work in the other.

For Commercial Life, distinguish between mechanical and intellectual ability.

May we venture briefly to attempt this task, and fi[illegible] distinguish between two entirely di[illegible]ts of usefulness in mercantile life [illegible] mechanical, and [illegible] higher or i[illegible] of

business life is made up of mechanical routine. A much smaller proportion, but a vastly more important one, consists of grasping new ideas and solving new problems. Routine work requires less previous training than higher work, but that training must include thoroughness and accuracy; but to keep accounts, to make out invoices, typewriting letters from dictation, and countless other functions in an office call for little else, and, if they are learned, such knowledge of commercial work as can be learned at school is only of value in giving a boy a start in an office, especially if he must at once earn something.

But the money value of such ability is very small. Now that every boy and girl has a chance to learn the three "R's" (we will not say how many really master even these), the commercial value of these acquirements is certainly less than the possession of strong thews and sinews, and a willingness to use them.

On the other hand, the capacity of thinking, of ready mastery of new ideas, and of dealing with difficult questions is by no means common, and it is by such qualifications alone that the higher prizes of commercial life can be won.

For the Higher requirements, Liberal Education, not based on immediate utility, indispensable.

In the very nature of things it is impossible to teach precisely the faculties required for the positions calling for these higher qualifications. What

is so well known that it can be included in a curriculum of study falls into the category of what is more or less mechanical; and it is the power of making a way where there is none that is wanted, not the power of running along the road. What can be done is to train the mind and will in the right direction, and seek to give the power of learning, rather than secondhand knowledge.

It is here that a sound general education proves of the highest value, and specially an education which encourages thought and originality combined with accuracy.

The gravest mistake we can make is to value studies merely by their apparent usefulness. Latin grammar is not much used in the office or counting-house, but the accurate use of words and the power of clear, definite expression are our constant need.

We rarely begin a calculation with—"Let x equal . . ."; but rare is the accountant who, without a mathematical training, can keep his head clear through a mass of complex figures, and the more training he has the better.

It is, after all, the power of learning, not the thing learned, that is the thing worth learning. This is especially true of science teaching: the amount of chemistry or physics that a boy can learn at sc[illegible] of the small[illegible] in itself; it is a [illegible]thing, comp[illegible] mass of science [illegible] master if [illegible] his living

by it; but he may at school learn the art of learning.

Again, that power of understanding a scientific question which may be learnt at school is likely to be of more actual value to one to whom such questions lie somewhat outside his regular work, than to one who must learn a vast deal more of the subject later on.

Accuracy, thoroughness of work, and high character necessary for the Higher Commercial work.

Accuracy, thoroughness, and grasp of thought must, then, be the foundation of a higher commercial education, and unless a broad and deep foundation of general knowledge is laid, a mere superficial acquirement of commercial technique is worse than useless.

To these add that *longue patience* which, if not genius, is something almost better still, and the modesty that comes of knowing what you do not know, and add also a determination to take business, even in the dull, early stages, seriously, and not to subordinate it to games and amusements, and you have given all that can be given without the discipline of the actual work itself.

But the foundation must be thorough: it is in most cases impossible to build such a superstructure as we have been considering on the basis of an elementary education suitable to a boy who is to leave school at twelve or thirteen. A boy of exceptional ability may make up for deficiencies

in his early training; but as a rule the shallow and pretentious training of the Board School too often, though happily not always, fails entirely to bring out the faculties required for the *haute commerce.*

As for foreign languages, here again accuracy and thoroughness are everything: railway chatter is worth very little; the power of accurate and adequate translation is worth very much, and nothing but a real knowledge of grammar can give it. This knowledge is specially hard to attain to one who only knows English, which has no real grammar.

Only the elements of Technical Knowledge desirable.

As for technical office-knowledge, it would be well to give an elementary idea of what terms mean, what a ledger is, what a balance is, what sort of thing a bill of exchange is—just the elements which save time to a beginner, but do not let the student think he knows more than he actually knows.

No Royal Road to Commercial Success.

One word of warning to beginners—in order to obtain, and indeed to qualify for, higher posts the infinite drudgery of routine must be faced. No one is fit to command who has not learnt to obey. The future officer ought to go through all the drill of the rank and file, and in commercial life he must not expect to get his promotion till he has shown himself worthy of it.

(23.) THE RELATIONS OF SECONDARY TO HIGHER EDUCATION

By ARTHUR SIDGWICK, M.A., *Reader in Greek to the University of Oxford.*

Recent Advance.

IN the memory of living men who are not yet old great national efforts have been made to cure some of the worst defects of English education. In the last fifty years we have seen a universal system of primary education created, new life breathed into the endowed schools, nine of the most important Public Schools reformed by a special Act, and two new Universities and sixteen large University Colleges founded; while the two older Universities, with the aid of two Commissions and reforming energy from within, have doubled their numbers, broken down their barriers, greatly enlarged and varied their studies, actively developed their main work of producing and distributing knowledge, and at the same time have done much in diverse ways to help education beyond their borders, and increase their hold on the country.

The crying need.

All this, though valuable, is only a beginning; and meanwhile one great task is not even begun—the proper provision and organisation of Secondary Schools. The crying need is now generally admitted. It ought to be within the reach of every parent who can keep his children at school till sixteen or eighteen to give them such an education as shall fit them to take up their own professional work with efficiency, and bring a properly trained intelligence to the discharge of their public duties and responsibilities. All are agreed that this must be done if those who are now young are to have a fair chance. The daily work of the world grows harder and more complex, and higher faculties and better training are needed to do it.

Such a system would have wide-reaching consequences in a variety of directions. The effects on trade, on the professions, on the empire, on local government, on public work of all kinds would be ultimately great and important: and not the least of these effects is that which would be felt by the higher education.

What is the higher education?

It may be perhaps best defined as the systematic first-hand study, under the best teachers and with adequate methods and appliances, of at least one portion of the organised realm of knowledge. Something of this is, or ought to be, within reach of any student at a University.

How will it be affected? The answer is, that it will be affected in a variety of ways, which may be considered briefly under the heads of (1) the students who come to Universities, (2) the studies they pursue, (3) the teachers the Universities train.

1. The Students.
(*a*) More of them. In regard to the students, it is pretty clear that when we have a proper system of schools the opportunities of advanced study will be more widely demanded and new facilities will be found. Once the deficiency of schools is supplied, and proper local bodies are appointed to look after the education of the district, there will be a larger number of children trained in Secondary Schools, and the quality of the teaching will be better. Some of the incompetent and fraudulent schools will disappear, others will be improved; new ones in many places will be called into existence, with better management, and curricula more adapted to the public needs.

(*b*) Of new kinds. With increased and improved supply of good secondary teaching, there is bound to be a larger demand for higher studies after the school age. The advantages which are enjoyed by those who are intended for the principal professions—lawyers, clergymen, doctors, teachers, journalists, Civil servants—might well be extended to those meant

for other employments. There is a constantly increasing number of such employments, under the complicated conditions of modern life; and in many kinds of business, trade, and manufacture, in many special departments of public work and administration, it would be better both for the business and the men who enter it if the general education of the latter was carried to a higher point, and if the subjects of this advanced study were selected with more reference to the students' future occupations. Opportunities for such study are to be found at many of the University Colleges and similar new institutions, and a beginning has been made even at the older Universities.

(c) Girls.

Amongst the new students thus attracted to higher education it cannot be doubted that an increasing number will be girls. The women who desire or are compelled to earn their own living are yearly more numerous, the schools where they are taught have vastly improved in living memory, and it is of the first importance that all the advantages of higher education should be open to them. This is now very largely the case; but something remains to be done in removing obstacles which prevent them from making full use of existing opportunities, or having new openings made available.

2. The Studies.

In regard to the studies, the ideal to be aimed at

is the adequate supply of courses of instruction calculated to enlarge the mental view and develop the faculties, yet adapted severally to the increasingly various employments for which the students are destined. Every occupation, whether a learned profession, a trade, a manufacture, a business, intelligent private research, or public work, involves principles, methods, and ordered series of facts, which can be profitably studied on academic standards, apart from the practical detail that belongs to the special apprenticeship. The recent widening of the higher education has been very great. The older studies—classics, mathematics, law, philosophy, history, theology, medicine—have received large additions. Science, English, modern languages, Oriental languages, engineering, agriculture, social and economic study, pedagogy, geography, have taken their place in various centres as regular parts of higher learning; and elastic systems have been organised for the encouragement of special research. The sharp distinction between the "cultivating" and the "professionally useful" studies has been partially obliterated, to the advantage of both. The "cultivating" studies, it is found, can be made in the highest sense useful; the "professional" studies, by proper arrangement, can subserve the purpose of cultivation.

There is no reason why this movement—which in some places is still very partial—should stop at

the point which it has at present reached; and the new organisation of Secondary Schools will be sure to act as a stimulus to its further development. The local authorities to whom the organisation will be entrusted will sooner or later acquire much knowledge of the educational needs of those who pass out of their schools. They will be sure to confer among themselves: they will study the existing opportunities of higher education: they will contribute valuable facts and local knowledge to the discussions that will arise. Instead of the dispersed and disregarded suggestions of isolated educational reformers, without power to carry out their ideas, and often with imperfect vision of the essential facts, the knowledge of the new needs will be gathered, sifted, and made available by those who have the power to help materially in the attempt to supply them. Thus the higher education, while losing none of its present influence, will gain in variety and adaptability; it will have a wider range, and a firmer hold on the national life.

3. Teachers to be trained.

A minor effect, but one which must not be overlooked, is the more thorough training which the Universities and University Colleges will be called upon to give to Secondary teachers of all sorts. As the Report of 1895 conclusively showed, the immense preponderance of qualified opinion is in favour

of all Secondary teachers having undergone special professional preparation before they enter on their work. Yet at present the number so prepared is infinitesimal compared with the total of those engaged in teaching. Two qualifications are essential for a teacher—(1) that he should know his subject; (2) that he should have some idea how to teach it. Adequate knowledge can be certified by a University Degree or other test, and is generally understood and exacted. Adequate power of teaching is usually not certified at all. Of late there has been a great movement of opinion in favour of providing opportunities of training; and private bodies as well as many of the Universities and University Colleges, have made efforts to supply the need. The difficulty at present is that training costs time and money to the aspirant, and, unless he has a strong motive, only the exceptional man will undertake it. The new Secondary Education Bill, which at least contemplates a system of Registration, will help, if it is passed; for some certificate of practical efficiency will ultimately be an essential condition of registration. And, even in default of compulsion, every one who wishes to succeed in his profession will have a strong motive to qualify for the register. Further, just as Universities provide special aids for the professional preparation of doctors, clergymen, lawyers, and Civil servants, so still more is it naturally within their province

to give corresponding assistance to those who mean to be teachers.

How organisation will help training.

The organisation of secondary education will greatly promote this important work. The local authorities will have power to give financial aid; and they can refuse it to schools unless the teachers are trained. They will, in many places, establish schools of their own; and they will assuredly not be content with teachers of uncertified competence. And even short of this, they will gradually become a centre and a channel of expert educational opinion; and no one acquainted with the facts, in England and elsewhere, can doubt that such opinion will be on the side of adequate professional preparation.

Summary.

In these various ways, among others, the proper development of Secondary Schools, for which we are looking, will directly influence the higher education, and incidentally receive valuable aid from it. A new demand will be created for advanced studies; and a new elasticity and variety in these studies will be called for, which will make the higher education more widely useful, more influential, and more secure. And the centres of higher education will influence the schools by a closer connection between their respective studies, and a steady supply of competent teachers, duly instructed in the soundest learning, and trained on the best methods.

(24.) (i) UNIFORMITY IN EDUCATION.[1]

By JAMES GOW, LITT.D., *Master of the High School, Nottingham.*

SECONDARY Education in this country wants, it seems, intellectual rather than financial organisation; a competent national council should be appointed to formulate national theories of education and to issue curricula for schools of different types, and for each main subject of study there should be a committee of experts to collect information about that study and suggest the best methods of teaching it. If the first of these proposals, a national council, is conceded, no doubt the second could be very well carried out by voluntary effort; but this is a detail which need not be laboured till the main point is established, which is, that intellectual organisation by means of general curricula is necessary and desirable, and should precede financial organisation by local authorities. Surely it is desirable and necessary that the public at large should take an intellectual

[1] *This is the substance of a paper read before the Incorporated Association of Head Masters in January,* 1898.

interest in the schools, which it will not do until the schools are arranged on some intelligible plan. It is desirable and necessary that the teaching profession should be adequately informed of its own progress, as it cannot be while there is no competent authority to suggest or watch experiments and to form a sound judgment on results. It is desirable and necessary that the profession should be relieved from the danger, the very pressing danger, of falling under the control of clerks and inspectors, who, though they may be able men, are not teachers, and who, the more expert they become in their own business, grow also the more inaccessible to the influence of teachers. Briefly, unless some such intellectual organisation as is here proposed is carried out before anything else is done, in the first place our education can never be so good as that of rival nations, and in the next place, Secondary Teachers will gradually decline from the standards of a profession animated by a high sense of honour and duty, and will fall back to the methods and the status of a trade union.

Objections raised: i. from local self-government side.

To any scheme of intellectual organisation two objections have been raised. The Duke of Devonshire, speaking in October, 1897, at Darlington, said, in effect, that the English people were so wedded to the principle of local self-government that they would not

submit to the control of a Central Council. Without disputing an opinion of the Duke of Devonshire, one may express surprise that he should express it, because it is immediately fatal to all his other contentions. The Duke of Devonshire for years has been proclaiming—and went on, in the very speech in question, to proclaim—the doctrine that National Education is a branch of national defence. "Next to the maintenance of a great and powerful Navy," he said, "the future of England may depend on the schools and on what is taught in them." If that is a true doctrine, as I think it is, then education should be treated accordingly. Is it proposed to entrust the warlike defence of Northumberland or Cornwall to the County Councils of those districts? No; it is not, and for a very good reason: because the safety of the whole country depends upon the adequate protection of every part of it. Similarly, it is not sufficient that there should be good education here and there, for we have that already; there must be good education everywhere, else the nation is not sufficiently protected against its rivals. And this high general efficiency can only be secured by the supervision of a Central Council comparable in character and authority with the Admiralty and the War Office. Education is already one of the most costly branches of our national work. Why spend more on it if there is to be no security that the work shall be well done at every point?

ii. from the Royal Commission on Secondary Education.

The second objection proceeds from the late Royal Commission, which emphatically condemned uniformity in education, though it gave no reasons for its condemnation. Now "Uniformity in education" is an ambiguous expression. It may mean "uniformity of curriculum" or "uniformity in methods of teaching," and these are quite different things. The latter sort of uniformity, in methods of teaching, is objectionable, because teaching is an art, even a fine art, calling for invention, intellect, taste, judgment in the highest degree, and it would be absurd to attempt to reduce this to a uniform mechanical process. But uniformity of curriculum is on a very different footing. Consider the analogy of some other art. There was a long period in the history of painting when artists had practically no subject for pictures except the Virgin and Child; but, notwithstanding this uniformity of subject, the methods of painting and grouping, the coloration, the expression of devout feeling, all that is intellectual in the painter's art, was not uniform or mechanical, and a Virgin and Child by Botticelli bears hardly any resemblance to the same subject when treated by Raphael. If this be disputed, another analogy may be taken, the art of cricket. Doubtless it was always possible to find some pleasure in knocking a ball about; but skill began to be developed only when rules were introduced,

and now, when everybody plays cricket on a pitch of the same length, with a ball of the same weight, with a bat of the same width, and so on, skill and public interest are at their highest, and yet there is no uniformity of method. Grace does not bat like Ranjitsinhji, or Peel bowl like Richardson. The fact is that it is essential to the progress of every art that a great number of persons should be trying to do the same thing, each in his own way. The limitation of the subject-matter is an aid, and not an obstacle, both to the development of the artist and to the appreciation of the spectator. Similarly, the art of teaching will never be highly developed or highly appreciated by the public until a great number of persons are engaged in trying, each in his own way, to teach the same things—these things being so clearly defined that the public can become intelligent critics of the process. Does any one doubt it? Let him consider for a moment the immense improvement in teaching which has been occasioned by the Institution of the Local Examinations, and ask yourselves how much of the improvement is due to uniformity of subject, uniformity of standard from year to year, the rivalry of teachers to secure the best results, and the publicity of the success.

Existing uniformity in curricula.

This consideration leads opportunely to two others, which are of high importance to the matter in hand. In the first place,

there is already a great deal of uniformity in the curricula of our schools. The Universities of Oxford and Cambridge examine every year nearly 30,000 children in examinations which offer nearly the same subjects and the same standards to children of the same age. The London Matriculation attracts nearly 4000 candidates. The College of Preceptors has a host more. It is obvious that schools which prepare for these examinations must have the same or nearly the same curricula, and that a very trifling adjustment would suffice to produce in several hundred schools, including all the largest, all the uniformity that any sane man could desire. It is customary, indeed, with opponents of authorised curricula to cite the story of the French Minister of Education who took out his watch and observed with pride that every child in France was then engaged upon a lesson in geography ; but this rigid uniformity is abandoned even in France, and need not be named among Christians any more. Not only is it not required, for intellectual organisation, that all children should do the same thing at the same time ; it is not even required that they should do precisely the same thing at all. It is not necessary that they should all read the "Merchant of Venice," or "Caesar, Book V.," or "La Jeune Sibérienne ;" it is necessary only that they should all give the same amount of time to the same branch of study, and should, at about the same age, aim at the same

standard of attainment. Well, this result could be secured with very little adjustment of time-tables, and very little alteration of customary names. Upon inquiry into the later history of boys who left Nottingham High School to go to other schools—for instance, Manchester and Rugby—it has always been found that they go, in their new schools, into forms of the same denomination and continue the same work, often with the same books, and a committee could arrange a series of standards, ranging from the first form to the sixth, which would cause hardly any disturbance in most Secondary Schools.

Uniformity due to Public Examinations.

The second consideration is this. Such uniformity as now exists is mainly the result of certain examinations. But the effect of public written examinations is very far from being wholly good, either to teacher or to pupil. The subject being necessarily narrow, the standard necessarily the same from year to year, the time given to each paper necessarily short, these examinations tend to produce uniformity of method as well as of subject. The teacher is apt to neglect *this* topic because it is never set, and to lay stress on *that* because it lends itself to a neat question; and thus, while the worst craftsmen are improved, the best are certainly degraded. The effect on the pupil is more serious. He sees his teacher content, or compelled, to outwit the examiner, and he

regards an examination as the end of knowledge. Nothing is worth knowing which is not required for examinations: everything worth knowing must be presentable in a neat paragraph, and when all examinations are passed there is nothing more to learn. Thus the examination system does a great deal to bring about that intellectual atrophy of which the signs are so abundant at the present day. Now, if we had a statutory uniformity in schools, all the good effects of examinations would follow without the bad. The teacher, for instance, who is required to give two hours a week to English literature, would choose some book that he loves or that he wants to read carefully for himself, or that he knows he can teach really well. He would stand up to his class like a man to give freely of his learning, his experience, his judgment, his enthusiasm. It matters little if what he gives is not of the best; at least it is genuine, it is a bit of real life, and some other teacher would supply the corrective. That is the position that I wish to see the teacher occupy, and that he does not occupy under our present system. If it be asked whether this desired result is really produced under statutory uniformity, the answer is "Yes," and the proof may be found in Mr. Sadler's admirable series of reports on education in Germany and other countries, where uniformity prevails but examinations are almost unknown.

Different types of schools need different curricula.

In conclusion, the whole subject may be looked at from another point of view—so as to give, as geometers used to say, the analysis as well as the synthesis of the problem. Let us suppose a National Council of Education to have been appointed and to have issued a series of curricula for schools of different types: for Secondary Schools which prepare for the Universities and the professions, for Secondary Schools which prepare for business, for Technical Schools, for Higher Grade Schools, for Elementary Schools. No stress need be laid on this list, which is given merely to illustrate the kind of work that the Council should do at their discretion. Suppose that, for Secondary Schools, with which alone we are here concerned, the curricula should state what subjects should be taught, what time should be given to each, and what standard should be attained in each form or set. Suppose that each school were required to print, every term, a complete list of each form and set, with time-table and subjects of instruction. Suppose that local inspectors were appointed, whose business should be to visit the schools, and without interfering with the teaching, to certify that the work was really done and the standards really maintained. Consider what advantages would result from such a system to the public, the profession, and the pupils.

Advantages of recognised curricula.

Parents would, in a few years, understand the work of each school and the standards of each form, and would assist in keeping their children at least up to the average standard of their age; and again, parents who removed from one part of the country to another would have security that they would find somewhere near their new home a school differing only in unimportant particulars from that which they had lately left. Schoolmasters would be protected from ignorant and vexatious interference, but at the same time any indolence or incapacity or duplicity on their part could not long remain undetected. The good teacher would not remain obscure; he would have a better chance of promotion, and would not, if he were accidentally thrown out of employment late in life, have so much difficulty as he has now in finding a new place. The preliminary professional examinations could be abolished and without detriment to the professions, for it would be open to them to say, "We will not take a boy except from a school of a certain type and from a certain standard in it." The time saved from examinations could be given to learning, and the evil effects of examinations would not exist. Every teacher would teach his best, conscious that he was in rivalry with hundreds who were trying to do the same thing, and that his success could not be overlooked. Experiments

could be publicly notified and the results recorded by competent judges; and teachers, when they met in council, would discuss the practice of their profession with the assurance that they really could get something done in time. Overlapping would be impossible, or would at least be open and undisguised. A local authority would be able to say what type of school was wanted in its locality, and on what scale it should be supplied. A schoolmaster applying for public money, could say precisely for what purpose he wanted it, and could show that it was necessary. And lastly, the general public would be enabled to take an intelligent interest in its school-system.

(24.) (ii.) WHAT DIFFERENT KINDS OF SECONDARY SCHOOLS ARE NEEDED?

By JAMES GOW, LITT.D.,
Master of the High School, Nottingham.

Work for the Central Council.

ANY one who seriously sets himself to imagine in detail what the Secondary Schools ought to be like when Secondary Education is organised, cannot fail to see that the Duke of Devonshire is right in beginning reform with a central office and a central council. It is obvious to say that there must be schools of different types, and that each type will be defined by its curriculum, and that the curriculum will be determined by the age at which the pupils leave school, and that the age of leaving will depend on the callings for which the pupils are intended. But the habit of liberty is so ingrained in Englishmen that they will not consent, as Germans easily did, to accept a neat logical scheme and to adapt themselves thereto. In truth, we are all anxious that other people's children should know their place, but that every career should be open to

our own. There must, therefore, be, in practice, compromises at every turn, and the nature and extent of these compromises will demand the closest attention of the wisest heads for many years to come.

Compromises required.

In the first place, every University and every profession in the kingdom has instituted, as it is at liberty to do, its own entrance examination; and these examinations exercise, on the curriculum of schools everywhere, an influence which no merely local authority can override. Supposing, however, that such examinations did not exist or were "squared," we are still face to face with the difficult question whether Secondary Education is to deal with the training of faculty or with the acquisition of useful knowledge. The first theory may be right, and yet Englishmen will expect a choice of curricula. The second theory may be right, and yet the English father will object if he is required to say irrevocably, for a boy of ten years old, what career he is to follow and what knowledge will be useful to him. There must be a *locus paenitentiae*, so that parents and boys may change their intentions without grave loss of time and trouble. Again, given a series of distinct curricula, it will be found that so many English parents send their boys to boarding-schools that there are not in any town, save a few of the largest, or in any boarding-school, save a few of the largest, enough boys to keep several distinct curricula going at once and in their

fullest efficiency. There must be compromise here, or great waste of money or injustice and waste of ability. Lastly, there must be compromises made at discretion by the schoolmaster to meet the cases of individual boys whose brains differ somehow from the average. Every successful school could show examples of all these compromises, which are in fact essential to its success.

The Benefit of concert.

Since, then, our Secondary Education is never likely to be ideal or to differ very much in kind from what it is now, what is the main improvement that we are to look for? The chief defect, and it is one that makes our Secondary Education look more chaotic than it is, is that the compromises are not *concerted*, as they might be and ought to be. Every school, though it teaches the same subjects as other schools, may teach them in a different order and to a different extent. The consequence is, that the public, finding no schools quite alike, has no reasoned opinions on education, and believes that there are none in this country. More examinations, more inspectors, more training of teachers are demanded, and we believe that by their means we shall soon overtake the studious German. It is not so. In Germany there is very little inspection and examination, and, till recently, there was little training of teachers either. The real difference is that in Germany everybody understands what the schools are about, and the schools stand by one

another. That is the relation which makes education both popular and effective. With tact it might be produced in England in a few years without injury or disturbance to any interest, and with immense advantage to the public and the teaching profession.

Suggestions for an open compromise.

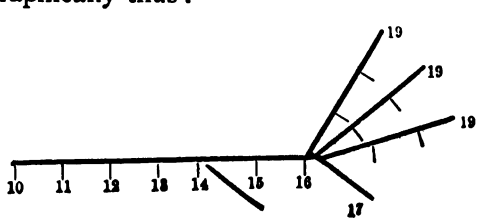
Suppose it were agreed—

(*a*) That up to the age of fourteen (*i.e.* the average standard for boys of fourteen) there shall be one and the same curriculum in all Secondary Schools (*i.e.* that the subjects of instruction and the time given to each shall be the same, but the methods of teaching shall be left to the teachers themselves).

(*b*) That at the age of fourteen boys intending to leave school at fifteen shall diverge into a separate curriculum, while boys who intend to leave later shall go on together with a joint curriculum.

(*c*) That at the age of sixteen boys intending to leave school at seventeen shall diverge into a separate curriculum.

(*d*) That at sixteen boys intending to leave school at nineteen shall begin the special curriculum of their faculty. This arrangement may be put graphically thus:



It will be allowed that, if a concordat of this kind could be framed, the public would soon master the details of it. Immense benefits would probably result from that one fact; but we will confine ourselves to perfectly safe prophecies. The whole of the arrangement above suggested, or any part of it, could be carried out even in a small school, especially if the separate curricula (for 14–15 and 16–17) were not wholly different from those of the higher ages. Technical Schools would know exactly what material they had to use, and could adapt their work accordingly, whereas now they have to receive boys at all stages of preparation, and waste half their time in getting them to one level. The curriculum of Elementary Schools could be attached at a definite point to that of Secondary Schools. A local authority could easily see what was deficient in the local schools and could estimate the cost of remedying the deficiency. There would be no overlapping. A boy who altered his destination unexpectedly would not lose much time or trouble. Schoolmasters having a definite authorised course of study at their backs could assert themselves against the caprice or ignorance of parents, and could also organise experiments of almost scientific accuracy. Lastly, for we must end somewhere, this arrangement would involve very little disturbance, for, details apart, something like it is established in

every large school in the kingdom. The details are the real difficulty, but here the tact and wisdom of the central council will find their room for display.

(25.) LIBERAL AND TECHNICAL EDUCATION

i. The difference between the two.

In the wise and witty work on "The Action of Examinations," written more than twenty years ago by the present master of Trinity Hall, there is a passage on the difference between liberal and technical education which deserves to be recalled to memory at the present time. "It will be of service," wrote Mr. Latham, "to fix precisely the meanings in which the terms Liberal and Technical Education will be used. These two phrases are commonly employed so loosely as to be useless where precision is required. I propose to use them in a rigorous sense; premising that most Liberal Educations are so far Technical that they enable a man to do something which he could not do before, and most Technical Educations are Liberal ones also in so far as they really improve the man by disciplining his attention and forcing him to care and accuracy; moreover, it has a good moral effect on a youth to feel that he has acquired a mastery over matter, or the power of doing something which is of service to other people. . . .

"An education is liberal so far as it concerns itself with the good and the cultivation of the pupil; valuing any accomplishment it may give him, for the new perceptions it opens out, for the new powers it confers, or for any other good it may do the man, and not regarding the work produced; Liberal Education would like to make a man an artist that he may have a delightful occupation, and acquire an eye for beauty and for truth; she would like him to paint well because this would show the possession of such an eye and many other qualities as well, but she would not care much about the pictures themselves; she would not care a bit whether his pictures were valuable or not.

"An education so far as it is technical is careful not for the workman but for the work: Technical Education wants to get good pictures, and she only values any qualities of an artist so far as they conduce to this end. She aims at moulding the man into a perfect instrument for a particular purpose."

ii. Illustrations. The Yorkshire country-gentleman in "Eothen," who, "abounding in Homer, really loved him in all truth, without whim or fancy," had studied the Iliad and the Odyssey in the spirit of a liberal education. Not so a crammed schoolboy who gets up his author as part of the craft of winning scholarships. Instruction in bootmaking is

primarily meant to produce a competent cobbler; but when George Stephenson set himself to learn cobbling in order to sole his sweetheart's shoes, his studies were inspired by a larger motive than that of acquiring technical skill. St. Augustine tells us, in his "Confessions," that, in his student days at Carthage, he studied rhetoric, as we might say, with a technical aim, in order to excel at the Bar; but it was in the course of this very study that he read Cicero's "Hortensius," which "changed his mind, changed his very prayers, changed his wishes and aspirations," thus unexpectedly leading him to the best of all possible outcomes of a liberal education.

In speaking of liberal and technical education respectively, there is a tendency to go to the Humanities for illustrations of the first, and to the Natural Sciences for illustrations of the second. But is it not the influence of bygone days which inclines people thus to think of natural science too exclusively as part of a technical education? Science has become a necessary element in liberal education also. No one can now be considered to have received the basis of a liberal education unless he has been taught to understand the meaning of scientific method, to habituate himself to the exact search for a cause for every phenomenon, and to appreciate the character and some of the collateral bearings of the greater generalisations which are the highest expression of

modern scientific thought. Natural Science in this sense must be regarded as a necessary part of the texture of liberal education. Not through language and literature alone, but through letters and history, illumined by faith and science, must students seek their knowledge of the humanities. To specialise at any early age, whether in letters or in science, is to forego the benefit which a liberal education can give. And so far as the course of a liberal education is concerned, the scientific lessons must be brought into very close intellectual relation to the rest of the curriculum. They must be a leaven, not an appendix.

But of course there is a kind, and a very necessary and valuable kind, of scientific teaching, the aim of which is technical. It is essential to the welfare of our country that this should be developed and encouraged in every way. The interests of technical and liberal education are not antagonistic, but reciprocal. The two types of education supplement and reinforce one another, liberal education being necessary not only to qualify persons to derive the full advantage from the technical education which follows it, but also (and this is by far the more important of its functions) to give them that wide intellectual horizon and large sense of the significance and inter-dependence of all social relations which are the best safeguards against the individual being dehumanised by a course of training designed (and necessarily

designed) to produce a perfect instrument for a particular task.

A course of technical education in science will necessarily pay special regard to applied science. But, on the other hand, it will by no means neglect the theoretical science which is the foundation of applied science. It would be fallacious to speak of theoretical science as exclusively appropriate to the stage of liberal education, and of applied science as exclusively appropriate to that of technical. Just as theoretical science forms a part of technical education, so many bits of applied science form a part (though generally not more than an incidental and interest-arousing part) of liberal education. Nevertheless it is true that applied science tends to fill a place of increasing importance in the specifically technical education which trains men for certain callings wherein scientific knowledge is applied to industry.

Thus what really distinguishes a liberal from a technical education is not so much the subject-matter of instruction as the spirit which actuates the student in his work and the teacher in his teaching. It is a misfortune that we have no precise English equivalents for the German words Erziehender-Unterricht and Fach-Unterricht—words which exactly mark the distinction made above between liberal education and technical education respectively. Not linguistic or literary studies alone are humane, nor are these perforce

humane. The training of hand and eye and ear may be for culture instead of for bread-winning; and, on the other hand, Dante or Sophocles may be studied, not for the love of humane letters, but in order to win a post or a salary. It is not in the subject-matter of his studies, but in the aim with which those studies are undertaken and pursued, that we must look for the true distinction between the education which is concerned with improving man as man, and the training which is concerned with improving the tool for the production of a certain kind of work. To make the distinction we must go below the surface of things. We must show discrimination and sympathy. We cannot rely with confidence on any formal test. We must get beneath the outer shell and try to understand the spirit in which the work is being done.

At the same time, it is important to bear in mind the fact that certain subjects of instruction naturally lend themselves more readily to the purposes of technical, and others to those of liberal education. The choice of the material of a course of education is not a matter of indifference. The masterpieces of literature are much better adapted to be the vehicle of liberal education than is the study of machine construction.

Nor, again, does it make a given course of education any the less elevating in itself or the less liberal in its effects on character, if those who pass through it prove, as a rule, to be the best

material for the *subsequent* operations of professional or technical training. Similarly, in the industrial world, the product of one process often proves to be the best raw material for another process—but it by no means follows that the first process is therefore necessarily or always undertaken for the purpose of producing raw material for a subsequent stage of manufacture.

iii. Liberal and Technical Education may sometimes be found under one roof.

As a matter of fact, we cannot classify our teaching institutions into two divisions, those in the one being *exclusively* devoted to liberal education, and those in the other *exclusively* to technical. The specialised work of an "army class" at a great Public School, though frequently excellent both in its moral effect and in its intellectual quality, cannot by any stretch of the words be said to fall within the meaning of the term "liberal education." Nor, on the other hand, would a course of lectures on Shakespeare become technical education because delivered in a Technical College. Then, again, boys (and the same is true of girls) have to begin their technical or strictly professional studies at very different ages according to the sacrifices which their parents are able or willing to make for the prolonging of their education. Some children have to begin their technical training immediately they leave the elementary school. Or they may, as half-timers, attempt to combine their first years of

practical work with the last years of their elementary school life. And some authorities believe that it might be advisable to give, as it were, a technical tinge to some of the lessons in the elementary or higher elementary schools. Again, in Secondary Schools, there is not an age from fifteen upwards at which some boy or other has not to break off his schooling in order to enter practical life; and if the gate admitting to his chosen calling is guarded by a special examination, there will be a natural tendency on the part of his parents to demand, and of his schoolmaster to arrange, that the closing months of such a boy's school-life should be largely devoted to special preparation for this preliminary professional test. Such special preparation may easily, though not necessarily, be technical, rather than liberal, in spirit. Yet, again, among those who can proceed to a University, there will be some who, before their undergraduate life is over, must begin to specialise with a view to their future calling, while others can postpone any such specialisation until the close of their academical career. Thus, at every point except the lowest, there fork off from the trunk of Liberal Education branches which must be marked as belonging to Technical Education. Technical studies necessarily begin at very different points in different careers. From this it results that one single educational institution often comprises more than one aim. It

is rarely the case that it is devoted exclusively to technical, or exclusively to liberal, education. But it is far from following from this that the *general character* of a given educational institution is not either one or the other. This, in fact, is almost always the case, and on this fact rests the necessity and the wisdom of administrative differentiation.

Is it not one of the highest aims of modern statesmanship to bring within the reach of every man and woman liberal culture *and* practical education? Both are necessary for all who can appreciate them. But to serve the purpose, each must be as good as (in view of the capacity and the opportunities of the given individual) it can possibly be made. High quality is essential to educational efficiency. "I would found an institution where any person can find instruction in any subject." These were the words used thirty years ago by Ezra Cornell in describing the purpose of the great University which bears his name. They may be taken to define the scope of a national system of education in the modern sense. Within its range every citizen should be able to find instruction in any subject—liberal culture, that is, *and* practical education. But the only way of making this policy really effective is to insist on the aims of liberal and technical education being kept separate, while both types of education are steadfastly regarded as necessary halves of one

complete whole. Just as it has been found to be necessary at Cornell University in order to give effective expression to its founder's aim, so also is it essential to the building-up of an efficient, well-adjusted, and progressive system of national education in the modern sense, to insist on sharp division of educational function combined with a strong conviction of educational unity. There must be a place for every one and every one in his place. Muddle means inefficiency, and inefficiency, however cheap it looks on the surface, is the worst kind of waste. But any division of educational function must be accompanied and inspired by a strong and effective conviction, constantly present, in the mind of all teachers and educational administrators, that every part of the national system of education exists in order to subserve the common interest of the whole. *Sicut in uno corpora multa membra, omnia autem membra non eundem actum habent.*

iv. In England the statutory definition of Technical Education has made the confusion worse than before, and should be amended.

But, as if it were not sufficiently hard in the nature of things to distinguish between liberal and technical education, the confusion is deepened in England by the definition of technical education contained in the Technical Instruction Act of 1889. "Technical instruction," we are there told, "shall mean instruction in the principles of science and

art applicable to industries, and in the application of special branches of science and art to specific industries and employments. *It shall not include the practice of any trade or industry or employment,* but, save as aforesaid, shall include instruction in the branches of science and art, with respect to which grants are for the time being made by the Department of Science and Art, and any other form of instruction (including modern languages and commercial and agricultural subjects) which may for the time being be sanctioned by that Department by a minute laid before Parliament, that such a form of instruction is required by the circumstances of its district."

The administrative freedom and elasticity enjoined by the last sentence are altogether praiseworthy and sensible, but otherwise the definition presents many difficulties to the educational inquirer. It is prolix. It is obscure. It lacks principle. It contradicts itself.

Surely the essence of technical education is that it should teach a man how to combine theory and practice. It should teach him principles and how to translate those principles into the actual doing or making of something. In any useful sense of the words, technical education must therefore include initiation into the *practice* of a trade as well as into the *theory* of a trade. What it cannot do (except in the case of a few artistic crafts) is to impart great *dexterity* in actual workmanship. That is to

say, a technical school can hardly ever teach (and should rarely try to teach) a man to acquire that rapidity and accuracy of execution which can only be learnt by years of labour in the workshop itself. The economic and industrial conditions of the factory can hardly ever be reproduced in the technical school.

But our statutory definition of technical education actually goes out of its way to exclude from technical education "the practice of any trade or industry or employment." This is a very different thing from warning us not to attempt to impart in the technical school that practised dexterity which can only be learnt in the workshop. Is it true that the words referred to were devised to conciliate the supposed prejudices of some of the Trade Unions and thus to ward off their opposition to a Bill which might otherwise have incurred their displeasure on the ground of its tendency to increase the number of skilled workmen? As a matter of fact, the healthy instincts of the working-classes as a whole would, if properly appealed to, have repudiated the charge implied by the insertion of these misleading words. The ablest and most energetic among the rising generation of workmen strongly feel their need for *practical* instruction in the general practice of their trade. Minute division of labour under the factory system is making it increasingly difficult for young people to get an all-round training in the practice of the trade in which they are employed. This is what

they want from the technical school, and, in so far as it is impossible for them to get an intelligent grasp of the practice of their trade without some knowledge of the general principles of science which underlie it, they are anxious that the practical instruction should not ignore the necessary complement of theory. But no sensible workman or employer believes for a moment that the technical school can ever supersede the factory as a place in which to learn rapid dexterity in the execution of a specific task.

Technical Education in England is, by general consent and with universal approval, becoming more practical every day. From the first, local authorities have felt constrained to ignore those words in the statutory definition which declare that "technical instruction shall not include the practice of any trade, industry, or employment." And it is fortunate for them that in so doing they can point to the fact that the statutory definition contradicts itself, and while in one sentence forbidding the teaching of the practice of a trade, in another sanctions instruction "in the application of special branches of science and art to specific industries or employments."

v. Some Educational Institutions are predominantly liberal in aim, others predominantly technical.

Turning away from the obscurities of this statutory definition to the actual facts of the case, we observe at once that

certain types of teaching institutions are predominantly "liberal" in their educational aim, while others are predominantly "technical." This is the distinction which should determine their place in our educational system.

The different branches of education must not, however, lose the sense of being parts of a common whole, and (a far more serious matter) there must not arise an impoverishment of the life of the schools through their being cut off from the interchange of influence between one type of education and another. Each type has its characteristic excellence and its characteristic defect. For example, a besetting sin of "liberal" education is to coddle dilettantes. A besetting sin of "technical" education is to make men think too much of the sordid and money-getting side of life. It is desirable to check the faults of the first by keeping it in closer relation to the sturdier tasks of practical life and citizenship, and to refine the other by securing, so far as possible, the presence of a "liberal" element in its curriculum.

But, though each of these two great types of education should thus in part approximate to the other, the two can never fully coincide. Their functions are different, and they are differently fashioned in consequence. Each presents its own special problems, all of which however must be reviewed and solved in the light of a large outlook

over national education as a whole. This combination of special knowledge and wide outlook would be promoted and secured in two ways: first, by there being one Permanent Secretary, whose function it would be to co-ordinate the action of the various sections of his office; and secondly, by the formation of the Consultative Committee, which, taken as a whole, would reflect the consensus of educational opinion in the country and, in the person of its individual members, would provide special experience in regard to each of the different branches of national education.

vi. A wealthy nation can most afford, but all civilised nations need, the influence of liberal education.

Not every nation can afford to set apart an equal proportion of its strength and ability for the purposes of receiving or giving a liberal education. How much it can afford to spare for such a purpose will depend in large measure on its wealth. What under one set of economic conditions would be a useful "leisure class," under other conditions would be a perilously large "academic proletariate." But every civilised nation needs the influences of liberal education, and must make sacrifices to secure them. It is the presence in a nation of a leisure class of scholars, sufficiently large for its labours to impress public opinion, that helps to keep up a high tone and standard of national judgment on intellectual things. And nothing, perhaps, more clearly distinguishes one

people from another people, or one stage in the development of a given nation from another stage, than the degree and kind of sacrifice which it is prepared to make in order to secure the presence of a leisure class devoted to the cares of liberal education.

vii. What ought we in England specially to aim at in this regard?

There are two things in particular towards which it would appear that we in England would do well to work.

i. To protect the individuality of each citizen. And one way of doing this is to give to each child as much and such liberal education as is consistent with not spoiling him or her for the duties of life. One pressing form of social danger is the tendency of Capitalism in industry to regard men and women and children as the raw material of labour, and to judge education solely by its success in making these good, cheap, living tools for use in one or other of the processes of industry or commerce. Excellent, if education does this as *part* of its work. Fatal to the freedom of human development if this comes to be regarded as the *chief* aim of education. But none play the game of Capitalism more effectively than those who prevent the schools from reasonably fitting their pupils for life as well as for livelihood. Schools out of gear with life produce men and women without that grit of character which is a necessary basis for the development of individuality, and of a keen

sense of individual responsibility. A nation, the component parts of which are losing the sense of individual responsibility, is marching straight towards collectivism, under democratic forms, maybe, but none the less in reality under capitalist control.

ii. To help in averting this danger, we should raise liberal and technical education alike to their highest power. This can only be done if we have real sympathy with each, and real knowledge of what is excellent in each. In order to secure this, we need to make use, in each type of education, of administrators who combine exact knowledge of one type with a desire for the full development of the other. But this means that they must clearly bear in mind the difference in the aim of liberal and of technical education. By muddling along and mixing up the whole subject in inextricable confusion, we miss the only chance of inducing frank and helpful co-operation among all concerned in promoting the educational welfare of England. Before we can wisely design educational machinery, we must make up our mind what kind of product we want to get from our machinery. In order to agree about methods, we must first agree about aims. In education, as in other affairs of life, we must define the issues in order wisely and economically to deal with them.

(26.) WHAT DIFFERENT KINDS OF TECHNICAL INSTITUTIONS ARE NEEDED?

By C. H. DRAPER, D.Sc.

General Aims.

TAKING it for granted that the aim of our technical schools is the increase of our national industrial and commercial efficiency, it is a matter of great concern to consider how that aim is to be accomplished. England has now a large number of technical schools, but no national policy.

The United States has developed several types of school, each very vigorous, and adapted to a specific end. Germany presents less variety, though not less excellence; her schools are extremely good, and she shows no doubt whatever as to their precise purpose and function.

A study of the technical schools of these countries cannot fail to teach us much; while an examination of the work that has been done and attempted in our County Boroughs, as well as under County Councils, indicates the main lines along which it appears at present wise to proceed.

The latter will serve to show what, under the

present conditions, may be immediately practicable; the former will serve to set the ideal.

Rural districts present a great difficulty. The highest developments can only take place on a large scale by means of centralised institutions. It is to be hoped that ere long the process, now rather too prevalent in the counties, of dissipating the "Customs and Excise" grants in small streams may be abolished, and that attention may be concentrated on staple industries, adequately treated in institutions placed in convenient centres. Local jealousies must give way to national needs.

Technical Education takes many forms. There is the technical education of the engineer, manufacturer, merchant, agriculturist, etc., aiming to do for them what the hospital training does for the medical man, Woolwich Academy for the engineer officer, or Oxford University for the clergyman. There is the training of the skilled artisan, which is to help him to replace the loss of the system of apprenticeship.

The day technical college, the monotechnic school, the evening technical school, the elementary science and manual training school, will each have its hands quite full if our efforts are to be measured by our needs.

Higher Institutes.

The most important of all is the technical college. Even with highly competent officers we may, as a nation, be beaten in the industrial war, but with

incompetent officers destruction is almost certain. When we read, in the valuable report issued by the Manchester Technical Instruction Committee, of the 694 colleges of the United States, possessing £57,000,000 worth of property, with 122,000 students taking courses of a distinctly high rank, we realise our terrible deficiencies in this grade. The Massachusetts Technical Institute at Boston has thirteen distinct departments; the average age of admission is nearly 19 years; the entrance examination is high; the Institute's course extends over four years; and it has 1183 students. It may be doubted whether all the higher technical colleges and schools in England could together show such a roll. Yet this is but one of a large number of colleges equally good! No wonder that the skill shown in the organisation of American "works" is described as marvellous. For these students *do* enter the world of commerce. Seven ex-students of this school in the faculty of engineering alone are at this moment presidents of great companies, sixty-six are vice-presidents, superintendents, or managers, eighty-eight are assistant-managers, and so on.

Our cousins have not the slightest doubt concerning the value of the highest technical training. But this training is no narrow trade teaching. As the Secretary of this Institute says, "The real college of science must graduate men not only prepared for professional undertakings, but as broad

in their sympathies as any bachelor of arts. Guided by far-seeing wisdom, promoted by men who perceived that a liberal culture can spring as truly from modern as from ancient standards of utility, these institutions have become colleges in the broadest meaning of the term, and are taking rank with the Universities."

So also it is on the European continent. The polytechnics at Zurich, Charlottenburg, and in scores of other towns are devoted to the training of the best intelligence of the country to the very highest point.

It must be confessed that we have nothing like these. Manchester is spending £200,000 on a technical school which, when finished, will be one of the glories of England, but let us humbly note that the cost of the engineering laboratories—a single department—at the Boston Institute is also close on £200,000.

Technical education must be interpreted in no narrow spirit. We need agricultural, economic, engineering, and other faculties in our new University Colleges, with sufficient specialisation to make the students masters of their crafts, and sufficient general culture to give them interest in the many sides of life.

The courses at these higher institutes must aim at giving a mental discipline and training, *plus* a knowledge of the sciences of the occupation chosen, *plus* some practice. The college will keep itself

closely in touch with the world of industry, will wherever possible ally itself with actual works, and will encourage post-graduate study and research on matters referred to it from factory, field, or counting-house.

It is a good thing to teach our little boys science; it is a much better thing to give to our young men the highest and broadest training that can be obtained—scientific, technical, or commercial, but as liberal as it can be made.

The Englishman is as fine a fellow as any in the world; but it is a cruel kindness to lead him to suppose that he can with a walking-stick overcome a German or an American wielding the keenest blade the world affords.

Monotechnic Schools.

Another necessary type of school is that which devotes itself entirely to training for a single industry. Germany has developed this type of school to great perfection. One of the most remarkable is that at Crefeld, which is devoted to weaving and dyeing. Here are trained the German cotton manufacturers who are slowly but surely driving England out of some of her markets in cotton goods. All such schools in Germany are built and lavishly equipped for the training of comparatively small numbers of day students who are trained, not up to the stage at which they are barely qualified for an appointment, but up to the limits of knowledge of the particular business treated, and into the region of research.

We have nothing that can compare with them in perfection of equipment or in the high character of the work. The "Process Printing School" at Bolt Court, Fleet Street, the Horological School at Coventry, and a few others, are attempting something of the kind; but so many British towns are the seats of specialised industries, and so many more might be, that it is to be hoped we may see several more of these schools established in suitable centres.

The direction in which England has done most under this heading is in art. Some good schools of art exist in England, although the application of art to industry among us is not so high as in France.

For instruction in scientific agriculture we have several special colleges, such as those at Cirencester, Wye, Uckfield. And agriculture is not one of our most flourishing industries. *Absit omen!* It is easier to maintain an efficient industry than to raise one that is "depressed."

Here, again, in this class of institute a smattering given to a multitude is not of much service. The very highest training, that will put the men on to the crest of the latest wave of knowledge or taste, is what should be aimed at, so that they should be able, if not to originate, at least to appreciate suggested improvements.

Evening Classes.

One type of school, however, England has

developed to a larger extent than any other country. That is the evening technical school; and while our system or lack of system remains what it is, a great deal of the work must be done in such classes, and when they are conducted in sympathy with the needs of business and fostered by business men they are very useful. Such classes are usually attended by persons in contact during the day with the phenomena and processes which form either directly or incidentally the subject-matter of the teaching, and in the case of individuals who seriously desire to learn and who have not forgotten their schooling the result is often very effective.

The system has the great advantage of affording one of the means by which a young man with more brains than money may be enabled to rise to the higher levels, and many of the managers of our industrial enterprises have been thus made. But, after all, from the necessities of the case, this system turns out a second-class rather than a first-class product.

Concerning a large number of the students, however, it must be said that they come in a very unprepared state; their capacity of expression in English, and their power of understanding it, is small; their knowledge of arithmetic is smaller still. And again they are often tired and incapable of sustained effort; they often desire a system of detached tips of the trade rather than a broad knowledge. With such students but little serious

good can be effected. They need to attend continuation schools on leaving the elementary schools. Or, perhaps, when the employers become interested, means may be found by which the young men may attend classes in the daytime.

Science and Manual Training Schools.

Under the auspices of the Science and Art Department a number of schools have lately come into existence called Organised Science Schools, or now simply Science Schools. The curriculum set forth for these schools has much to recommend it, regarded as a basis for the subsequent work of the true technical schools, although it is not itself of a technical character, including, as it does, English, mathematics, science, drawing, and woodwork.

The age at which children may advantageously commence such work might be thirteen, or in special cases twelve; and provided that the temptation to cram the children with useless "useful information" be avoided, and elaborate care be taken to train them into habits of accuracy and mental alertness, much general culture can be achieved, together with much clearly-arranged knowledge of the more common phenomena met with in life and in many occupations.

In America such schools attach great importance to manual work, and during the last two years of a four years' course often definitely specialise and teach the principal trades of the district. It is to

be regretted that the South Kensington regulations for the advance courses of science schools do not permit of anything being attempted in this direction. If the syllabus of this class of school be only generally indicated by the central authority, and if local authorities be encouraged within limits to exercise judicious discretion under the supervision of competent inspectors, much may be done in such schools towards laying the foundation for a useful national system of technical education.

(27.) TECHNICAL INSTITUTES AND SECONDARY SCHOOLS

By J. W. LONGSDON, M.A., *Travelling Instructor to the Surrey County Council.*

The term "Technical Education."

TECHNICAL Education is a phrase used in so many different senses that it is necessary to state briefly in what sense it is understood in this article. The technical education of a doctor is gained in a hospital; the military colleges give technical education to officers of the army; schoolmasters and clergy receive at the universities the technical education necessary for their profession. This is the highest or tertiary grade of technical education. The skilled artisan gets his technical education, after he has left the strictly elementary school, sometimes by apprenticeship, but more often nowadays in continuation classes, at evening classes, or at special institutes of technology. This is the lowest or primary grade. Between these two grades lies the technical education that is the subject of this article; that is to

say, the special training which is undergone by boys and girls who leave the Secondary Schools at about the ages of sixteen or seventeen; and which is intended to give them more knowledge of, and to increase their skill in, the work by which they will earn their living, whether it be in connection with industry or with commerce.

Necessary limits.

Technical education is not, like Danish butter, a commodity all of one quality, which can be handed over the counter in pound or quarter-pound packets to any one who applies. A previous education of a certain sort must have been given, and a certain definite end must be kept in view. The school prepares the ground and makes it receptive. Whether it be a school or a technical institute that supplies the special knowledge that fits one for the counting-house, the laboratory, or the studio, that special knowledge cannot be given unless the general education is there as a basis. The second or middle kind of technical education, therefore, arises directly out of the Secondary School. The two must be dealt with together. The one is the coping-stone; the other the base. To lay a coping-stone on the air is a futile task. Yet such is the task that, as things are, is too often laid upon the technical instructor.

Secondary Schools.

Secondary Schools are sometimes said to be all those which, so far as leaving-age is concerned, lie

between elementary schools on the one hand, and universities or university colleges on the other. So wide a field needs some sub-divisions. We here refer only to those Secondary Schools where many pupils leave about the age of sixteen. Some few of these go on to a university college, *i.e.* the highest grade of technical education. Of the others, some begin to earn their living at once; others can afford an extra two years' training. It is of these two classes that we are speaking. At the Secondary School they have gained, or ought to have gained, powers of observation and powers of thought; general intelligence, and habits of methodical industry. It is not necessary at all that the subjects taught should have any direct reference to their future work in life. It is sufficient that the boy leaves school with his mental powers in good working order, agile, and watchful. If this has been done, he will have learnt how to work. Then he becomes a fit subject for technical education.

The State pays.

But the question arises: How far can or should this technical education be provided by the State? On what terms should the privilege of this technical education be conferred? In nearly every case the country pays most of the cost, through either local or imperial taxation. The sole plea that can be urged in behalf of State interference between parents and their children is this: it is held to be

for the benefit of the nation as a whole that certain members of it should receive a better education than parents can afford or are willing to give. But the fact that the State pays the piper enables the State to call the tune. That is to say, the State has a right to regulate technical education, and to decide the conditions on which it is provided or aided. The decision would seem to rest on this basis—a commercial one, it is true, but inevitable. The State should pay for the technical education only of such pupils as are capable of profiting by it, and of becoming better workers by means of it. This brings us to the conclusion that technical classes or institutes should not be open to any comer, but should welcome only those who can pass a properly graded examination.

Fitness must be tested.

And this test should apply equally to day technical colleges and to evening classes. To some extent, and in one form or another, it does already apply in the former case. But at present nothing is done to sift or test the applicants for admission to evening technical classes. The result of this is the direst confusion; the class may and usually does consist of five divisions. There are those who left school at the age of twelve, and who now come, at ages varying from eighteen to thirty-five, to *begin* their education; there are those whose brain-power has never been, and perhaps never will be, adequately brought out; there are those who are

too old to learn ; there are eager boys of fourteen anxious to make up for early neglect ; there are well-prepared students who are capable of making rapid progress in the subjects. This is about the usual composition of an evening class. Little wonder, then, that technical education has still to justify itself to the people at large. There must be greater concentration and more defined aims. There are as many kinds of technical education as there are kinds of schools. Each division of technical training must fit accurately on to the top of its corresponding division of general education.

Not every boy, however, who leaves school for commerce, for instance, will pass through a special commercial institute. As Mr. Bryce said the other day at Liverpool, "Supposing a boy left school at fourteen, was it better to give him a little more secondary education or plunge him at once into special instruction? His own view was that it was better he should continue his general education, and that more would be gained in the long run than by trying to specialise it." But, for all that, the Technical Institute for Commerce should have an organic connection with the Secondary School.

The Local Authority must keep Technical and Secondary Education in touch.

The type of Secondary School we have spoken of will no doubt come under the influence of the

proposed Local Authority for Secondary Education. This body will also have the spending of the technical education money. The school and the technical institute should be administered by the same local authority ; and not till this is done systematically and efficiently will the present reproach be rolled away, or will parents find out the value of technical, that is, specialised education. But although there must be the closest possible connection between the school, the institute, and the evening class, it cannot be too emphatically stated that this specialised training must not be begun too early. It is the duty of the school (among other things) to train the powers of the mind. It is the work of the technical institute to build up on this broad basis the narrow edifice of special knowledge, in order to fit the student for his bread-winning, whether it be in chemical dye-works, in a brewery, a machine factory, or a merchant's office.

(28.) TECHNICAL EDUCATION FOR GIRLS

By MISS A. J. COOPER, *formerly Head Mistress of Edgbaston High School for Girls.*

THE importance of Technical Education for girls has long been acknowledged, and special provision is now made in many places for the teaching of such subjects as needlework, cookery, and laundry-work.

But the due correlation of these subjects to the rest of the school curriculum is by no means fully recognised, though of late it has attracted a considerable amount of attention, and many interesting plans have been tried in order to show how the problem may best be solved in school organisation.

It is a problem which affects schools of different kinds. There is the technical work which forms the proper completion of the elementary school course, and belongs to the Higher Primary School, which carries on its pupils to the age of 14 or 15. But the Technical Education which we are now considering is conducted in the Secondary School, where the course contemplates a leaving-age of

not less than 16, and in the Technical Institute, which receives pupils at that age, where the higher branches of the subjects are taught, and where teachers are prepared for the specialist work which is needed in schools of various kinds. Here we are given, first, the problem of how the technical subjects are to be taught so that they may be made the most of, both as regards intellectual training and practical utility. Then, having defined our ideal of the school course in its simplest form, we have to decide upon the best means of properly equipping the teacher to make this ideal a reality. When these two problems are solved, it will be a comparatively easy task to decide what part such teaching should be made to play in the development of schools of other types.

No restriction to home arts.

The subjects which we have specially to consider are what have been called the Home Arts and Crafts. It is not supposed or intended that the Technical Education of women and girls should be restricted to these. The choice of a career may demand very different special training from that suggested above. But in other directions the work of men and women is generally similar, if not identical, and for the same (or similar) occupations the same (or similar) preparation is needed by women as by men. But the home arts and crafts are especially the province of women, and their importance to the life of the nation

cannot well be over-estimated. Hence the need of special attention to their due place in our school curriculum, and the development of sound educational method in their treatment.

The plan generally adopted hitherto has been to frame a curriculum out of the ordinary school subjects, and then find a place in it for the handicrafts. Books first and handicrafts in a subordinate place has been the rule, and in this way a constant struggle has been kept up between the two parts of the school course, the friends of general education resisting the encroachment of the handicraft teachers, and they on their part trying to secure such conditions as would enable them to do full justice to the handicrafts which they consider of prime importance.

Correlation of technical subjects.

Now that we are arriving at a fuller understanding of the nature of a school curriculum and the considerations which should guide our choice amongst the various subjects which clamour for admittance to it, we see that the conflict involves loss of power as well as loss of time, and that the mere putting of school subjects side by side is not enough, but their connexion must be sought out and expressed in the school teaching. It is this alliance between handicrafts and their connected science and art teaching which differentiates Technical Education from Technical Instruction, and it is such an alliance that we must

bring about between women's crafts and science and art teaching before we can have made the most of both parts of our school curriculum, and by this vitalising connexion brought out the full educational value of each.

Cookery and laundrywork are based on scientific principles, whether these are consciously or unconsciously applied, and the study of chemistry naturally allies itself to these crafts. It is not enough to give scientific facts to the pupils of cookery, but they must be made practically acquainted with scientific methods both of reasoning and of manipulation, so that in the kitchen and in the laundry they may discover for themselves the special instances and practical applications of truths which they have formulated for themselves in the science laboratory. Just as the workshop is the natural complement of theoretical training, so should the kitchen and the laundry be the natural complement of the science work, and give reality to the theoretical training; while both cookery and laundrywork are made more certain in their teaching, and of more permanent value and interest, by this introduction of scientific method, and this relation of everyday work to underlying principles.

Syllabuses required.

Some valuable experiments have been made to show how such teaching should be carried on, and the recognition of such an educational aim is spreading. Much still remains to be done, for it is

no easy matter to plan a syllabus of teaching which would put into practical shape the work of the two sides of such education. Here we come to the question of the teachers and their training, for it is to them that we must look for the full development of such a course. For this they will require good science training, as well as good training in one or other of the handicrafts usually taught to girls, and if they can add some knowledge of educational principle to guide them in the pioneer work they may have to do, it will be all the better for them and for their work.

The subject of needlework has been longer admitted to our school course than either cookery or laundrywork, and as its basis is artistic and not scientific, it demands rather different treatment. But the same principle holds good—that we may start with our handicraft, then seek its natural allies amongst the ordinary school subjects, and so through the everyday work get on to the parts of our educational curriculum which will give it real and lasting value. Then, when these demands have been satisfied, the remaining part of our available time can be filled in various ways, our choice of subjects being guided by the main idea that we wish to make everyday life as interesting as possible, and to give to our pupils the means, both practical and theoretical, of making the most and the best of what belongs to their ordinary life. Outside interests may help, but if these are linked

in some natural way to everyday routine, they make that routine less dull and mechanical, and so school becomes, in a double sense, a preparation for life—that is, it prepares for the practical needs of everyday existence, and at the same time gives a training which supplies fresh elements of interest and development to what is at present often dreary and monotonous.

(29.) ORGANISED EDUCATION AND THE TEACHER

(i.) THE TEACHER AND THE STATE.

By J. C. TARVER, M.A.

AMONG the provisions affecting Secondary Education in the Board of Education Bill, the registration of teachers occupies an important place; but registration cannot be effectively dealt with till the profession is otherwise organised; it must be preceded by a registration of schools; of those that are called private, no less than of those that are called public; otherwise the status and experience of a teacher will be very loosely defined. The public see in the cry for the registration of teachers chiefly a means of eliminating incapable teachers; but this touches only the fringe of the question. As a matter of fact, at the present moment there is no teaching profession which can demand to be heard on such a vital question as the organisation of examinations for the public services and professions; individual head masters may be consulted as a matter of courtesy and

prudence, but there is no publicly recognised and regularly constituted body to which a Minister of Education could apply if he wished to hear the united voice of the men who are concerned with the practical work of Secondary Education.

Governing Bodies and their Responsibility.

Further, at present absolute discretion is given to the various bodies who from time to time appoint head masters, even to our most important schools. Character, no doubt, with faith and sense of duty, ranks as the first great qualification of the teacher, standing above both knowledge and method; and where this is recognisable, no serious objection can be taken to the present practice; but where, as is too often the case, no adequate statement as to character can be made, a reference to University honours is substituted. In the minds of many men who recommend to an appointment, or who have a share in electing a candidate, a University degree is apt to outweigh all other certificates; and that too when the degree in question is merely a statement of a certain standard of intellectual proficiency, as shown in an examination passed perhaps twenty years before the candidate offers himself; as if a man ceased to learn at three-and-twenty. In consequence, to our largest and richest schools men are not infrequently appointed as head masters who have had no personal experience of school work and school organisation. We

not only make appointments equivalent to suddenly promoting a sub-lieutenant to the command of a regiment; we do worse. We are not shocked when—to continue the parallel—a general is put in command of a ship; for a successful University tutor need know no more about school work than a line officer does about the organisation of a man-of-war.

Qualifications for Headmasterships.

We do not insist upon the necessity of special experience in the person of a headmaster, and in so doing ignore the existence of teachers as professional men. It is not so very long ago that an eminent football player was appointed to the headmastership of a High school in a North Country town; the locality required his services in the football field. Such extreme cases do not often occur, but the fact remains that there is no body of regulations or recommendations to which Trustees and Governors of schools can appeal for guidance; no statement that it is necessary for a headmaster to have had such and so much experience. There is, in fact, no established tradition among Governing Bodies, and nothing even approaching an educational system in this respect. And if Governing Bodies have no common bond, what wonder that a voluntary society like the Head Masters' Conference has little voice in the administration of the educational system of the country; that it cannot satisfactorily deal with

the training and qualifications of its own teachers; has not organised entrance examinations, whether for scholarships or otherwise; never done anything to regulate the preparatory schools, from which the public schools are supplied; never collectively brought itself into contact with the Universities with reference to the training of teachers? Endued with no powers and no responsibility for the collective weal, the headmasters feel no responsibility except for their individual work; each thinks of his own school in the first place, and fails to see that he has even a higher duty than that of attracting pupils to his own particular establishment, that his first duty is to the country.

The training of teachers may be a good thing; if not placed in the hands of doctrinaires it will be a good thing; but it will not bear any fruit unless it is accompanied by stringent rules as to the qualifications of headmasters, no less than assistants; and by the recognition of the teaching profession as an organised profession working under clear and definite regulations.

Qualifications for Assistant Masterships.

Further, it should not be in the power of the headmasters of the larger public schools to appoint absolutely inexperienced men to relatively lucrative masterships; for though such a course may suit the convenience of a particular school, it discourages men who have acquired experience. It also demoralises the public conscience

in these matters, by allowing those who should guide public opinion to assert in a most practical way that experience is of relatively small importance in a teacher. Parents who pay high fees for the education of their children are at least entitled to an assurance that they will have the services of teachers who have been tested by something besides an examination at Oxford or Cambridge, especially if, as is at present the case, the examination was not specially designed for teachers.

In the long run, where two forces compete in the same field, one of which is organised and the other is not, the organised force is bound to prevail. It is for want of organisation that the body of Secondary teachers is losing ground on the frontiers where it meets the body of Board School teachers and the Science and Art Department; and that the results of its valuable work are in danger of being lost by sheer neglect.

When the State enforces registration of Secondary teachers, it must give them something in return, and the most valuable thing that it can give them is organisation.

This organisation, to be effective, must deal with the top of the profession as well as the bottom, with governing bodies and headmasters no less than with assistants, with examining bodies no less than teaching bodies.

(29.) ORGANISED EDUCATION AND THE TEACHER.

(ii.) THE REGISTRATION OF TEACHERS.

By the EDITOR.

THE registration of teachers is not the simple matter which some people seem to think it, nor, again, is it an insoluble problem, as might, perhaps, be inferred from its failure to secure legislative settlement within the past forty years during which it has been more or less before Parliament.

Difficulties of Registration: i. Parliamentary.

From the parliamentary standpoint the subject presents two considerable drawbacks: in the first place, the highly technical question of the necessary qualifications for teaching is one which the House of Commons is little fitted by knowledge or by temperament to decide; and secondly, any attempt at decision would inevitably raise the whole problem of educational organisation, of which registration is but a part.

ii. Professional.

The form, then, in which up to the present time

the subject has been placed before Parliament has been fatal to any settlement being reached, and it has been easy for opponents of registration to point to the cross currents among teachers themselves which undoubtedly exist. There has, in fact, been a certain ambiguity of purpose even among the advocates of registration. Is the register to be a mere catalogue of all persons in England who would be entered as "teachers" in a census of the population? Or is it to be open only to those who possess certain assigned qualifications? In the former case, to be enrolled on such a catalogue would confer no particular honour, and would be of little practical value to any one. In the latter case, the questions at once arise as to what will be the qualifications for admission, and whether the register, which presumably is to serve the needs of a non-homogeneous set of schools, is itself to be homogeneous.

Different qualifications needed.

For instance, it is clear that the qualifications, especially in respect of intellectual attainment, for an assistant-mastership (say) at Eton must differ from those required at an ordinary Elementary School, or, again, at a Secondary School of the second grade. A master who happens now to be engaged in a Board or Voluntary School *may* be fully qualified to hold office at Eton. And, *vice versâ*, a master who happens now to be engaged at Eton *may* be fully

qualified to serve with efficiency in the very different atmosphere, and under the very different conditions of a Public Elementary School. The register must allow and provide for such cases. But no one would propose to forbid a School Board or a Committee of Voluntary School Managers to appoint any one to be on the staff of their school who might fall short of the Eton standard. Nor, on the other hand, would any one propose to restrain the head master of Eton from appointing on *his* staff young men who, in spite of their fitness for work in a first-grade classical boarding-school, would be from one cause or another unsuited to the work of an ordinary Elementary School. In other words, the *minimum* qualifications for the post of teacher must, in the nature of things, vary according to the grade, curriculum, and other conditions of the school in view.

From this it would seem to follow that if a single register of teachers be compiled it must be so differentiated within itself as to correspond with requirements of various types of schools. If the register be not differentiated, it will be essential to fix a certain minimum qualification for admission. If this qualification be comparatively high, it might fairly be objected that an efficient class of teachers may be excluded; if this qualification be low, registration will fail to become a stimulus to teachers in the higher schools, and might even tend to lower

the standard of secondary education. The way out of this dilemma does not lie in establishing a single qualification which is neither high nor low, but consists in making different minimum qualifications for different sections of the register.

Intelligible classification wanted.

Furthermore, if the register is to be of service to the administrator or to the parent, it must be made easily intelligible, and this cannot be the case unless it be classified. To teachers, an alphabetical register with particulars of qualifications possessed inserted opposite each name might be sufficient, but to the public, who are not conversant with the relative values of the various qualifications, such a list might be actually misleading.

Proposed solution by Parliament.

The Board of Education Bill now before Parliament offers the following solution of this controversy:—

1. It proposes by a special clause to make provision for the registration of teachers hereafter.

2. It advisedly refrains from laying down at once the conditions under which persons may teach in various types of schools, and devolves upon a representative body of experts the task of framing the regulations for Registration.

No other method of dealing with the question is, we are convinced, practicable: experience has shown that Registration is a corollary, and not a

main proposition, in organisation, and the public may rest assured that the delay in settling a question of considerable importance will be amply compensated by the adoption of an elastic and yet judicious method of dealing with the claims of teachers to definite public recognition.

(29.) ORGANISED EDUCATION AND THE TEACHER

(iii.) THE TRAINING OF TEACHERS.

(*a*) *By the* HON. AND REV. CANON E. LYTTELTON.

IT is not possible in one short paper to notice the many floating objections which are advanced against the idea that teachers ought to be trained. They are by degrees losing their force among men and women familiar with teaching and with the results of teaching. But, among the general public, no great interest in the subject prevails, nor is it seen that if the question is of any importance at all, it is one which affects parents far more than any one else. The boys who are to be taught are *their* boys; *they* will have to pay for their teaching, and it concerns them intimately whether the teaching is as good as it can be or not.

Teachers themselves demand training.

And yet the demand that teachers of boys and girls in Secondary Schools shall be trained before they begin their work is

advanced, not by parents, but by teachers themselves. This is strange. The meaning must be that many teachers, convinced that teaching is a profoundly difficult art, are anxious to give the next generation of teachers a better chance than they had themselves of avoiding the early errors and serious omissions which attend on the first year's professional work. It is true that there are still some masters in great schools who do not share this wish. They look on experience as the one essential; it has been their only guide, and they think it has been sufficient. But as often as ever this view is put forward, so often two answers are made: First, that these gentlemen have no proof even now that they know as much about teaching as they might have known; secondly, that if they, with all their numerous advantages of education and public school experience have come to be successful schoolmasters, does it follow that other men who have lived much narrower lives and are shackled by every sort of restriction, financial and other, will do the same? We should all try to realise that men and women of the most varied calibre and opportunities are in question when we discuss training of teachers; not only the *élite* of the public schools.

Nature of training available.

But what sort of training would be given? Let us take as an instance the facilities now offered by Oxford and Cambridge.

A candidate for a certificate of competence to teach goes through a course of reading and lectures on what is called the theoretical part of training; that is to say, he makes acquaintance with the lives and writings of the great educational reformers of bygone times, such as Sturm, Comenius, Pestalozzi, or of more modern teachers such as Arnold and Thring. Then he is imbued with the elements of psychology, and finally answers on paper various questions on practical educational problems.

i. Practical.

But combined with this is a course of practical training which consists of teaching under supervision, preparing lessons on certain subjects and submitting the preliminary notes to an expert, and lastly joining in "criticism lessons;" that is when students and the teacher "assist" at a lesson given by a student to a class, and on the latter retiring at the end of the lesson, the hearers are called on to offer criticisms of the teaching, the arrangement of the subject, and so on. There is no possible doubt that some experience of this kind is most valuable, and it is to be observed that this ingredient of the training forms a decisive answer to the specious objection, that wherever a man gets his experience, his first batch of pupils suffer. They do suffer slightly, it is true; but let the two systems be honestly compared. Suppose an indifferent teacher begins teaching under the eye of an experienced

trainer. He has first prepared his lesson with the benefit of suggestions. Then all difficulties of discipline are, of course, removed by the mere presence of the elder teacher, and the great boon is secured that *the novice can afford to give his whole attention to the teaching without having to worry about keeping order.* One thing at a time is a great secret of all learning. But is it not certain that when a man raw from the University is planted down to teach a low form in a big school, all these safeguards are wanting? He has had no help before the lesson, and can look for none while it is going on. But, worse than all, unless he is an exceptional man, he need never even learn that he is making mistakes; and, if this is the case, how will he ever correct them? It is quite possible for a mistake to be a slight one in so far as it is easy to correct, but a very serious one in respect of the harm it does when persisted in year after year. And if the unfortunate teacher is never told of it, how is he to correct it?

Again, if the trainer finds that during the course his pupil shows a real incapacity to teach, he can tell him so, and thereby save the unfortunate man expense, incalculable worry, and a ruined career—and the boys who might have been his pupils from prolonged demoralisation. In short, the effect of the practical training is to sift the candidates for teachers' posts, and, in the case of those who are retained, to diminish considerably the risk of their

forming bad habits or persisting in them if they fell into them naturally.

ii. Theoretical. The benefits of the theoretical training are a little less obvious. Quite recently a distinguished Oxford professor has written to the *Times* an emphatic protest against the idea of training teachers, and based it on the statement, which his experience certainly entitles him to make, that psychology is not yet, and perhaps never will be, a sufficiently exact science to render it possible for young teachers to use it with profit; in short, that the processes whereby a young mind works are not known. Now, this sounds very serious, but let it be noted that Professor Case makes no attack on two out of the three departments into which training is divided. Granted what he says about psychology, it is quite irrational to decry the reading of the history of education as being inexact; and, again, it is still more irrational to suppose that the practical work of giving lessons under supervision is without effect. The professor has demolished to his own satisfaction the weakest of our subjects, but he has left the others intact.

But there is this to be said about psychology. There is a great difference between A who has read some psychology, and B who has not, in that A, though he may not retain many conclusions in his head which he can consciously use in his teaching, yet has realised once and for all that there are such

things as processes of growth; that his hearers have minds which expand according to a natural development; and even if he be hazy about the exact stage of that development, he is for ever safe from the peculiarly crass, blind blundering of a teacher who talks on wholly without thinking whether his words are suited to his hearers. Of such B perhaps is—not, of course, for certain or permanently; but it seems pretty clear that some study of psychology must tend to make this lamentable result a little less probable, even if it be not pursued very far. The knowledge that great thinkers are busied about the mental processes of the young must suggest to a teacher that if he is not careful he may be teaching in rude disregard of them. It must, one would think, lead him to try to be sympathetic, and even that bare result is a good deal. It is, anyhow, far more than many of us can claim to have experienced at the hands of men under whom we sat thirty years ago.

Something more may be done hereafter.

It is not, however, asserted that our theoretical training is yet perfect, or that, taken by itself, it is likely to make silk purses out of sows' ears. But the Universities may and do claim that such a combination of theoretical and practical work as they now provide is certain to equip any teacher against the worst and most fatal of the blunders into which thousands of teachers have fallen and do fall; unless the young man

be naturally incapable in which case he is warned not to continue. And it is for the outside public to take note that this is an honest and promising effort to remedy something at least of a great evil, namely the large proportion of intellectual failures which are still being turned out of Secondary Schools.

(29.) ORGANISED EDUCATION AND THE TEACHER

(iii.) THE TRAINING OF TEACHERS.

(*b*) *By* MISS A. J. COOPER.

Training—What it is and what it is not.

SELDOM has any title done such harm to the cause it represents as the title which stands at the head of this article—the training of teachers. It almost grates on the ear, and rouses the same kind of opposition as an expression like "the training of poets" might be expected to do. It suggests a mechanical process by which teachers are manufactured on one pattern, regardless of natural gift, academic qualification, or experience. Few object, on the other hand, to the thought of training nurses for the sick; yet even if training were taken to mean mere instruction in the mechanical arts and devices of sick nursing, we could not dispute that such instruction would be useful to a nurse, though it could not give her the gentle grace, modest

refinement, and sympathetic disposition which we all like to have in our sick nurse. Are there not also certain even merely mechanical devices and habits of procedure which, if found successful by experience, it would be well for the young teacher to be familiar with?

Principles, not habits alone.

But we cannot allow that training means nothing more than the formation of habits. A doctor's or artist's training means the study of scientific principles which are necessary to an intelligent execution of his work; it means practice under supervision, help given by suggestion or example. In nearly every profession except that of the teacher training is insisted on as a necessity; the physician, dentist, lawyer, naval and military officers, all have their period of training. Manual workers, such as artisans, tailors, and cooks, all have their apprenticeship. Yet those who deal with the most vital and delicate and easily modified part of the human being, at the most important, because the most impressionable, part of life, are allowed to rush in and begin their work with very little idea how to set about it, or of the material they are going to work upon. A knowledge of the way in which the mind stores up impressions and reproduces them helps the educator to teach so that ideas may be more easily and more surely remembered a study of the power of attention, its varieties [illegible]s, will

suggest devices to the teacher for gaining and holding the attention of children; a knowledge of the mental characteristics of various ages, of the relative merits of pleasure and pain in education, and of motives in general will *help* a teacher, though such knowledge alone will not *make* one. During a course of training a teacher will also be brought into contact with great educators of the past and present; he will see how the educational ideal has varied from age to age, and will be able to judge in what stage of its evolution it now is, to estimate more correctly the relative claims of technical and physical education, of classics and a "modern side;" he will gain experience under the supervision of more experienced teachers, so that the mistakes he makes are not likely to be so fatal to himself, or, worse still, to the children he tries his 'prentice hand upon; he learns to use the experience of others; he is obliged to turn his attention consciously to the methods used by successful teachers, to consider the possible results of such or such a course of action as practised by himself or another, to criticise his own work and its effect, instead of taking matters in the happy-go-lucky style of the blissfully ignorant. Above all, he can be brought to realise, as far as he is capable of realising it, the serious responsibility of his task and the need for the attainment, by assiduous practice, of at least a certain amount of professional skill.

Parents should demand training in the teachers of their children.

The ultimate responsibility for the education of children rests with the parents. It is they who must see that the teacher —whom they employ to do that for their children which they themselves have neither time nor ability to perform—has the qualifications which they have a right to expect in one who takes their money in return for certain work. Parents often reason most fallaciously in this matter. "So-and-so is a University man," they say, "has gained certain distinctions as a scholar; he has been well taught himself, therefore he must be able to teach my boy"—an argument which is equivalent to saying, "He has eaten well-cooked dinners all his life, therefore he must be able to cook dinners well." Yet a *chef de cuisine* is never engaged on such a recommendation. The education of our children is too serious a matter to be treated in this casual way. Young men and women are brought up in these days with a view to professional life, but examinations have to be passed before they can enter upon it; if they fail in these examinations all the plans made for them fall to the ground; more money and time have to be expended in putting them in the way of earning a living by some other means. Yet the boy who fails may be a gifted lad; and when the disappointed parent reviews the education his child has received, with a view to ascertaining the cause of failure, he looks

back at a period of months or years when the boy made little progress, when his teachers and he seemed natural enemies, and he blames his boy for being idle or careless, although in reality the only thing of which he can justly accuse him is that he was *a child*—a child who in *childhood* was treated as if he were an ignorant adult by some raw recruit from the University, or by some fossilised scholar, who knew as little as it was possible to know of the mind of a child; of the subjects that interested a child; of the natural way of presenting ideas to his childish mind, and of the language appropriate to his pupils' understanding; hence that long, wasted period till the boy grew more like a man, and was able to take in slowly a small part of that which his coach was anxious to cram in quickly for a few months before the disastrous examination. The career of our children is of such vital moment to them and to us, the development of character, tastes, and talents, the care of health so supremely important, that no one is justified in confiding his son or daughter to teachers who are ignorant of the principles of education. It is to be hoped that in the interests of parents, Teachers' Registration will soon be an accomplished fact, and that the State will do for its children what the parent has hitherto left undone—will see to it that those who offer themselves [illegible] youth are capable of doing the [illegible] of the children,

of the race, of progress, it is imperative that the teachers of the future shall be more skilled workmen than those of earlier days.

State Aid for the training of teachers for Secondary Schools.

Many a teacher who would gladly take a course of training remains untrained because the inevitable expense attending an extra year or two of study cannot be met without great difficulty; and since training is not yet universally insisted on, that teacher pursues the easier course, and takes a salary for work for which he knows himself to be unprepared. Those who intend to be teachers generally come from families where money is scarce, and it is impossible for the father of many grown-up sons and daughters to prolong the education of one beyond the age of nineteen or twenty. We demand, therefore, that the State should step in and give to the teacher of her Secondary Schools that help in training which she has so liberally provided for teachers of her primary schools. Let the need for skilled teachers be once fully realised, and it will not be long before improved methods of training, chairs of Education at the Universities, and State-aided training colleges will spring into existence and repair this breach in our national system of education.

Nevertheless, many "untrained" men and women are first-rate teachers.

Let us never forget, however, that just as mere "training" in the devices of instruction can never

turn a weak-willed, conceited, ill-disciplined fellow into an influential teacher, or a stupid and ignorant youth into a ripe scholar, so on the other hand among our "untrained" teachers are many men and women whose educative influence is unrivalled in the world. But there are far fewer of these teachers with a native genius for teaching and with natural aptitude for evolving for themselves good methods of teaching than is generally realised. A great part of the influence of English Secondary Schools is impaired or even wasted by the ineptitude and the mechanical routine of some of the teachers. To lessen this waste, to enhance the educative power of the Secondary Schools, *to make the future generations of teachers think more about the method of practising their professional art,* is one of the pressing educational reforms which this country should undertake without further loss of time.

The making of a good teacher.

The place of training in the making of a good teacher is thus described in the last report of the Education Department :—

"The importance of the fitting professional training of teachers for their future work is being more widely recognised in all grades of national education, and we are convinced that in such courses of preparation stress should be laid on the necessity of a broad basis of liberal culture, as well as on the acquisition of technical skill in the

methods of actually imparting knowledge. Both of these are indispensable factors in the preparation of teachers for their important work, and neither can be omitted without impairing the educational efficiency and influence of the teachers in our schools. At the same time, no methods, however elaborate, for the professional training of teachers can produce the most essential of a teacher's qualifications—viz. vigour of personality, strength of moral principle, elasticity of temperament, natural sympathy with children, and love of the work of teaching for its own sake. These are the qualities which make a great teacher, and no mechanical devices can supply their place. But to these must be super-added, by means of a prolonged and well-directed course of study, the power given by a liberal education. Much can also be done, by well-considered courses of practical training, to enhance a teacher's skill in maintaining discipline, in developing faculty, in imparting instruction, and in organising the tasks of school life with due regard to the aims of the type of school in which he will be called to work. But it is in the school itself that the teacher must become acclimatised to the special problems which the school presents. It is in the workshop that, whatever else is done for him, the worker has, after all, to learn his trade."

(30.) CURRICULA IN SECONDARY EDUCATION

(i.) THE PLACE OF THE HUMANITIES IN SECONDARY EDUCATION.

By G. LOWES DICKINSON, ESQ., M.A.,
Fellow and Lecturer of King's College, Cambridge.

THIRTY or forty years ago the teaching of Latin and Greek was the main business of Secondary Schools. In the great public schools it may be said to be so still, in spite of the introduction of the "Modern Side." But elsewhere the supremacy of language has been gradually undermined by science; and there seems to be a possibility of the complete elimination of the old classical curriculum. Many, perhaps, would regard this result with satisfaction. The study of Latin and Greek they may hold to be a survival of a barbarous age, an idle manipulation of words to the exclusion of a serious pre-occupation with things. But such a view will probably not be shared by the more competent and far-seeing advocates of scientific education. There is more in language than w[illegible]nd more in grammar than rhyming rules. [illegible]uage are closely implicated logic and

literature; that is, the capacity of thought and the capacity of feeling. It is erroneous to suppose that accurate thought is a special and peculiar function of the natural sciences. There is no subject matter which does not demand and involve clear definitions and a logical connection of ideas —grammar, or history, or law, and, for that matter, poetry, just as much as chemistry or physics. And if it be said that language can be, and is, taught unintelligently, the same applies in at least an equal degree to science. The really distinguishing characteristic of the natural sciences is, not that they train the reasoning, but that they train the observation. And, similarly, the "humanities" have their own special function, more difficult, perhaps, to define, but certainly not less important; briefly, it may be said, they train the feeling. Man does not live by brain alone, nor does the kingdom of heaven come "by observation." It is "within us;" and literature and art represent its projection in the outer world.

Place of Latin and Greek in Education.

To the Greeks, whose "fair humanities" have formed, for centuries past, the starting point and goal of our scholastic training, education was primarily a training of the feelings. Its basis was music and poetry, and its purpose to evoke a true intuition as to what is good and bad, beautiful and repulsive. "Virtue," says Aristotle, in effect, "consists in loving and

hating in the proper way, and implies, therefore, a delight in the proper emotions; but emotions of any kind are produced by melody and rhythm; therefore, by music a man becomes accustomed to feeling the right emotions. Music has thus the power to form character." To a modern teacher this last may seem a hard saying; but that the formation of character, whether by music or no, is the main end of his teaching, he is commonly the first to admit and to affirm. And of all the complex influences which may be made to contribute to that end, none is more potent than literature, which is the reflex of the soul of man. None, it might be added, is more potent than the literature of the Classics; for there, and nowhere else in equal degree, is to be found the wedding of the most clear and perfect form to the severest, manliest, and humanest insight. No one who has come to appreciate to the full the legacy of Greece and Rome, will regret the time devoted to the study of the classical tongues. For he will have added to his conception of the possibilities of mankind a whole region, which otherwise must have remained for ever closed to him, or, at best, but partially and dimly revealed.

The Argument against the study of Latin and Greek.

But such considerations, it may fairly be said, apply only to the few. The mass of boys never get beyond that initial stage in the study of language, which concentrates the

whole attention on the apparently impossible and barren task of avoiding false concords and a wrong use of the infinitive mood. The literature itself as such never comes within their ken; the most that they carry away with them is a certain discipline in accuracy, and a power to apply elementary principles of logic. The charge is too well established in the memory of all who recall their school days to be lightly set aside; and taken together with the increasing pressure of utilitarian considerations, it would seem to point to the disappearance of the study, at least, of the Greek language from the curriculum of many Secondary Schools. Such, in effect, is the tendency; it may be regretted, but it may be inevitable. Yet, even so, the disappearance of the Greek language need not, and should not involve that of the Greek humanities. Literature, it is true, is bound up with its form; and a scholar may plausibly contend that Aeschylus or Pindar are inaccessible through the medium of a translation. But it would be pedantry to push the objection to its logical end. Plato translated may not be the same thing as Plato in the original, but it may yet be something pre-eminently good. If the literature of Greece is to be closed to boys in the original, why shall it not be opened to them in translations? The ordinary schoolboy might in that way attain a more real and vital insight into the Greek view of life than by years of plodding through the maze of irregular verbs.

The Argument for the study of Modern Literature.

The only serious objection that can be offered is one that implies a more radical attack on the teaching of the Classics than any which bases itself on linguistic difficulties. It is not good, but bad, it may be argued, that a modern boy should be impregnated from his earliest years with the modes of thought and feeling of a people so remote and so alien as are the ancient Greeks from the civilisation in which his life will be lived. Classical literature, it may be maintained, is immoral; at best it is irrelevant. This view, it need hardly be said, is not one that is shared by the present writer. But even if it were adopted, we should have to dispense, not with the "humanities" at large, but only with the humanities of Greece and of Rome. If it be determined to cut boys off from the feeling of the ancient world, let them at least have access to that of their own age. Bring them into contact with the literature of England, of Germany, of France, what you will, so that somehow or other the spirit may be touched, not merely the senses or the brain. To "teach" literature is difficult, no doubt; it degenerates easily enough into teaching passages and dates by heart. But the difficulty is exactly the one which a teacher, with his heart in his work, will delight to overcome, and the reward will be greater there than in any other department of his work. For it is the [illegible] that he will have his chance of are[illegible]

of the beautiful and the good which is the condition of all fruitful knowledge, even in the region of science itself, and of all worth and excellence in life.

(30.) CURRICULA IN SECONDARY EDUCATION

(ii.) THE PLACE OF SCIENCE IN SECONDARY EDUCATION.

By L. C. MIALL, F.R.S., *Professor of Biology; and* ARTHUR SMITHELLS, B.Sc., *Professor of Chemistry in the Yorkshire College, Leeds.*

IT is no longer a question whether science shall be taught in schools or not. Thirty or forty years ago that point was hotly debated, but now the fight is ended. Science has won her place, and is more likely to tyrannise than to be tyrannised over. The new questions are questions of detail. How much of the school-time can fairly be claimed for science? At what age should science-teaching begin? How far can it be carried in school? What is technical knowledge, and what is the relation of the secondary to the technical school? We shall try in a short discussion to indicate the grounds on which such questions as these may be answered.

Scientific Information and Scientific Faculty.

Science is a word with many meanings, and may be used to cover things

which are essentially different. The educator will find it necessary to draw a clear distinction between scientific information and scientific faculty, which are as unlike as money earned and the power to earn money. Scientific information can be gathered by a diligent note-maker, whose invention and judgment are only half awake; it can be stored up in an encyclopædia. The really valuable gift is scientific faculty—the power to create and employ scientific information. The schoolmaster cannot create scientific faculty, though he can destroy or paralyse it. He can discover it, give opportunities for exercising it, and guide it into profitable channels. He will be wise to attempt no more than this.

How to discover and train Scientific Faculty.

Leaving scientific information to shift for itself, we will next consider what can be done to stimulate scientific faculty. We must begin early, for scientific faculty often shows itself early. We must begin gently, for we have to deal with the minds of children, which soon tire. Formal teaching, the mere pouring out of knowledge, will not help, but hinder. We want to set up the habit of inquiry, and there is nothing better for our purpose than the object-lesson, simple, varied, and unsystematic. That the object-lesson may be truly valuable, it must be given by a real teacher, who is at the same time a real inquirer.

The work that naturally springs out of the

object-lesson may be made to develop certain practical arts or qualities, which are essential tools of scientific inquiry. Chief among these are drawing, handiness, rational arithmetic, a flexible and practical geometry. Up to some such age as fourteen the child may fitly be employed upon the observation of natural objects and the discussion of natural problems, upon simple models and mechanisms, and working drawings. The class-lessons will be few, if only because they tax the inventiveness of the teacher and suggest plenty of occupations to the class. A weekly lesson may well mean three or four hours' work a week to both.

The real object-lesson, given as the best teachers can give it, will awaken the intelligence, set up the habit of inquiry, and give a practical sense of the nature of proof. It is not humdrum, formal lessons, that will effect this. The good lesson is always in some degree original; it has to be diligently prepared and diligently followed up. Every child can profit by sensible object-lessons. There is no grown man or woman who would not be the better for having been taught betimes to observe accurately, to describe, to handle tools, and to use calculation for practical problems. The teacher who trains all to do as much as this will be well placed for picking out those who can do more.

The Time to be given to Science.

In the later school years we shall begin to select those who show special

aptitude for science, and to increase the time which they devote to it. Even in the cases where we foresee that science is to be the future career, it will be desirable not to press it too eagerly upon the schoolboy. Because, first, the boy is no more matured in mind than in body. A study which demands exactness above all, and next to exactness hard thinking, cannot in a healthy scheme of education be more than one of the occupations of the growing brain. Moreover, man cannot live by science alone. Even the professional man of science must have some cultivated gift of expression, some power of holding his place in society, some recreation, not professional and yet not trivial. He will be called upon to explain his views, to guide discussions, to write reports and books. He must be a literate person, unless he is to be a mere drudge. On these grounds it is unsuitable that science should occupy a very large share of any schoolboy's time. It would be unwise to lay down the law for all cases; but we can hardly imagine any circumstances which would call for the devotion of more than one-third of the school hours to science, except for a very limited term. One-third of the time seems to us an extreme, not a normal concession to science. The school must aim at developing the whole man, and not one faculty only. The judgment and the imagination, the social sympathies, the muscles, the eye, ear, and hand, all need to be trained, as well

as the mental powers by which bread is to be won.

How far may Science be specialised in the Secondary School?

If specialised at all, it will be in the prospect of some early application. Let us try to follow the course of the boy after leaving school. If he has been selected for his scientific promise, he will very likely enter a college or technical school in order to raise his science to a higher level. Or he may go into active business and seek at once to apply his science to industry.

If the first alternative is chosen, it signifies little how far the boy has carried his science at school; it signifies much how he knows his science, and what is his attitude towards natural facts. The habit of inquiry, the habit of thinking about his work are all-important, but his future teachers will care little about his range. If he should be so unlucky as to bring from school a large mass of half-remembered facts and half-understood explanations, he will be worse and not better for his schooling. There are young men whose school-training in science has resulted in a bad style of work and a blunted curiosity. It would be well for such if the recollection of all that they learned in school could be blotted out.

The second alternative concerns a larger class of schoolboys. Many a parent entertains a hope that the science taught in school may start his

boys early in some remunerative calling. That hope is often disappointed, and as industry becomes more specialised and more scientific, elementary science will be found less and less applicable. Even now the scientific expert who can be usefully employed in brewing, dye-making, electric lighting, and the like, must have a knowledge far beyond the grasp of the schoolboy. That state of things has long passed away, if it ever existed, in which the workman could learn the elements of chemistry in a night-school and straightway improve the processes in his master's works. Industry now claims the best science of the day, and nothing less will serve the purpose. A little learning may qualify a man to fill some humble post, but not to direct important applications of modern science to practical problems. The secondary school is no more fit to teach science for professional use than it is to teach divinity, law, or medicine.

A knowledge of science, which is far too slight for the solution of industrial problems, may indirectly benefit the pupil if it gives him an intelligent interest in his future calling, and convinces him of the applicability of science to it.

What kind of Science is particularly suitable to the Secondary School?

This question is not properly one of our own raising. We have seen it raised and answered in what we thought to be a mistaken way. It is sometimes taken for granted

that the boy from the elementary school will go to work as soon as possible, while the boy from the secondary school will usually or often proceed to the university. We doubt whether statistics would bear this out; most boys, we believe, go straight to work, whatever school they may have attended. The educational distinction that we should draw would be rather according to age than according to class. We should teach the boy differently from the man; but we should teach the boy of the wage-earning class on the same general lines as the boy of the income-tax paying class. Natural, healthy development of body and mind should be almost our only thought when we are planning the occupations of the growing boy. There is, however, one difference between the elementary and the secondary school which ought in some degree to influence the course of teaching. The secondary school generally begins later and necessarily ends later than the elementary school. This has a practical bearing upon the science-teaching in particular. Continuous, methodical science is not work for very young boys; we greatly doubt whether it is of any real service to boys under fourteen, as a rule. We should, therefore, think it wise to make the science taught in the elementary school varied, interesting, and practical; it should teach the boys to observe, to draw, to work with tools, and to think. The secondary school may accomplish all this and something more;

it may lay a foundation at least for special studies. During the last two or three years of the secondary school course there may be something like a systematic, though quite elementary, study of physics and chemistry, or some other sciences.

The way of getting the best educational results out of school physics and chemistry is pretty well understood by enlightened science-masters. The syllabus of the Headmasters' Association is well adapted to develop the habit of inquiry and to open the way for future study. The objects selected are interesting to the schoolboy, and the methods practised are applicable to many details of everyday life.

Technical Science and Technical Schools.

Here we may remark that the word *technical* has been used so freely of late that it is losing all definite meaning. For present purposes we may define a technical school as one in which science and art are studied, not so much for their educational value as for the sake of increased mastery of industrial processes. It is true that these ends are not incompatible. When science is taught for educational reasons we ought not to neglect or treat coldly its industrial applications; they fix the attention as few other things do, and give great opportunities to the skilful teacher. Nor, on the other hand, should the technical school neglect either science or education. But

in the technical school, as we understand it, the industrial applications rank first in importance, and education second, while in the secondary school the places are reversed.

The fittest students for the technical school are young men, who support themselves by their work, and who have felt the need of a particular sort of scientific knowledge. The technical school should offer exact and practical training in applied science. Too often the working-places are filled by mere boys, and the teaching lacks all special virtue. Such technical schools are the creation of councils or committees who take little note of age or mental ripeness in their educational schemes, and imagine that the science which industry craves can be hammered into any person who attends so many hours a week. Technical schools for boys have no place in a well-ordered educational system.

An Educational Example. We must not treat the place of science in Secondary Education as a new and unexplored question. It has long found a practical settlement in Germany. When Germany is quoted as the country which has most effectively brought science to bear upon industry, there is often some suggestion that science plays a great part in the curriculum of the German secondary schools. Yet neither is science conspicuous in these schools, nor has it any strong practical bias. It is treated

rather as an ordinary constituent of general education, and industry looks for its scientific experts to the university or polytechnic school, just as it looks for its foremen to the continuation school or local technical school.

General Conclusions. It is unwise in the schoolmaster to aim very high in his science-teaching. He must not set boys to do the work of men. Early specialisation is nearly always mischievous. Interest in the work and good habits are far more important than any examination results. It is better to turn out one thinking man than a score of learned men. The schoolmaster who discovers and stimulates scientific faculty serves his generation better than one who disseminates bookloads of scientific information. The science which industry demands is not so much schoolboy-science, or the science of the evening class, as the best science of the day, and it is only this last which will be found truly productive.

(31.) WHY NOT ORGANISE THE TEACHING PROFESSION?[1]

By the RIGHT HON. J. BRYCE, M.P.,
late Chairman of the Royal Commission on Secondary Education.

THE effort to organise the educational profession is an attempt to gather it together into one body, having common hopes and aims, and to teach it to act as one for common objects.

The educational profession has become much more of a profession within recent years, since it has become disengaged from the clerical profession to which it was so largely attached, and since, I may also add, one side of it—that which deals with the education of women—has been so much more largely developed as a regular profession. In the general evolution of the professions it is quite late that the teacher emerges. He emerges in the Middle Ages as a branch of the clerical profession, and he continues to be a branch of the clerical profession even after the Reformation.

[1] *This Article is extracted from a Presidential Address given before the Teachers' Guild on Saturday, June* 3, 1899.

He is first distinguished from the clerical profession in the elementary teaching, but the teachers of Secondary Schools remained *primâ facie* and presumably clergymen down to our own time, and the teacher of a girls' school was presumably a lady whose father had died without leaving any provision for her, and who had not made any special preparation for the work of teaching. Well, these two changes have come in our time. In this way the profession is now, it may be said —I will not say "full-grown," but, at any rate, it has taken its stand and its position among the learned professions in a way quite unlike what was the case forty, or fifty, or sixty years ago.

The Teacher's work in itself interesting as an Art.

Now the educational profession has the great merit which attaches as a whole to the professions compared with business—commercial business—that the work which is done in it is work in itself interesting; work which calls out the intellectual faculties; work which is pleasurable in the doing instead of being, like so much—I will not say all—but like so much of the work done in business without any interest in itself for its own sake. It is, moreover, work which marks out the person who does it as an educated and cultivated person; and therefore, when you meet a teacher you are entitled to assume that he or she possesses a superior measure of cultivation and education. The same feature—that the work is pleasurable in

itself, being the exercise of one of our higher faculties—applies also to the profession of medicine and other branches of work in which science comes in; it applies to Art; it applies to Law. All, of course, have their corresponding drawbacks. As the ancient poet said, "*Quisque suos patimur manes;*" we all have the ghosts that afflict us, and every profession has its own specific evil as well as its own specific charm. The Bar has great freedom; but, on the other hand, in the profession of the Bar one is dependent on the patronage of solicitors. The physician has the pleasure of constantly experimenting, of using science at every step he takes; but he has the drawback of feeling that sometimes an impudent pretender, whose knowledge is far inferior to his own, but whose manners may be more insinuating than his own, succeeds in getting into practice before him. The artist has perhaps a still higher pleasure than the man of science, in producing works of beauty; but the artist has critics to vex his soul, he has the ignorance of the public which does not know good work from bad, and he has the terrible lot, when he has made a hit in any particular line, of being compelled to go on painting pictures of the same kind instead of being allowed to follow the bent of his own fancy. And in the same way in the Civil Service, which has the great advantage of permanence and of dignity, one is at the mercy of one's official superiors and depends to some

extent upon their favour for promotion, at any rate, in the upper walks of the public service.

Drawbacks to the Teaching profession.

So I think one may say that the teacher, if he has the charm of doing work that requires high faculties, has also some considerable drawbacks to face. Beyond the necessity for the constant exercise of patience, which it always seems to me is the greatest trial of the teacher's life, he has, if he is in a private school, the trouble of dealing with and conciliating parents, and, if he is in an endowed school, the possibility of trouble with his governors and other authorities placed over him. I remember, in the days of the old Schools Inquiry Commission, there was a paper of questions which they issued, and which, among other things, asked the Headmasters of endowed schools to say what were the chief difficulties they met with in their work; and I recollect the old Headmaster of an endowed school in the West of England who answered in these words: "Difficulties, three. Without counting the parents, I have twelve Governors, four visitors, and the Charity Commissioners." His school, I must add, had been in hot water with the Charity Commissioners. Well, if these are some of the difficulties and drawbacks which attach to your profession, it is all the more natural that you should endeavour, as you have done in this guild, to organise yourselves, to make

the profession more of a distinct entity, to draw its members together, to accustom them to professional co-operation, to induce them to discuss matters of common concern, and to endeavour to bring your united forces to bear upon such matters.

The oneness of other professions.

And that leads me to discuss a question which one must discuss before one can say anything profitable with regard to the position of your profession. It is the extent to which the educational profession is a united or a disunited profession. Now, the Bar, I think, may be called a united profession. All members of the Bar, although they differ in seniority, stand more or less on the same footing and have the same general interests. So, too, members of the medical profession, as well physicians as surgeons, stand upon the same footing and have certain common interests. No profession is nearly so much a profession as the medical profession is; none holds so tightly together; none thinks so much of its own professional interest as compared with all other things; and none keeps itself so much a mystery from the rest. And in the same way the engineers, and some other professions I might name, are tolerably united and organised professions.

Subdivisions in the Teaching profession.

But, when we turn to the teaching profession, what do we see? In the first place, we see that the teachers in elementary

schools are in many respects quite cut off from other teachers; they are by far the most numerous section, but they are a section standing in many ways by themselves. They are again subdivided into those who teach in Board Schools, and those who teach in Voluntary Schools, but that is a minor distinction. But they are certainly in many respects apart from the secondary school teachers, with a set of interests which belong to themselves in particular. And in the same way the teachers of Secondary Schools are divided by the fact that some of them teach in private schools, and some of them teach in endowed schools under more or less public control—not to add that some are headmasters or mistresses and some are assistants. Then, besides these, you have again a third class —the teachers in universities, who, although we do not commonly reckon them as part of the teaching profession, clearly belong to it, and ought always to be considered when we are speaking of the teaching profession as a whole.

Ideal oneness in the Teaching profession.

Now, the ideal for the teaching profession is evidently that it should have as much as possible unity—the same kind of unity as the medical profession, for instance, has—and that in the teaching profession as in the medical profession, it should be possible for a man or a woman to begin at the bottom and to rise to the top, the profession being one all through. And that

seems to follow from the conception of the teacher's art, because the art of teaching is one; it is the same art, in so far as it is concerned with the process of conveying knowledge to the learner's mind—it is the same art that is practised by the teacher in the elementary school, and by the professor in the university, and in reality, although we are apt to think that the work of the higher teacher is more difficult, that is not altogether true, because it wants just as much power of mind, just as much skill, to convey knowledge to the youngest child, and to convey ideas of the most elementary kind, as it does to teach the higher subjects to grown men. Therefore it might appear that the profession ought to be one in the same sense in which, let us say, the medical profession is one; but we see, as soon as we look at the facts, that there are great obstacles in the way of attaining any such ideal.

Practical obstacles to oneness among Teachers.

The practical difficulties are enormous. The kinds of knowledge which are needed for teaching in Elementary Schools and for teaching in Secondary Schools or in Universities, are totally different in measure and quantum of knowledge. You require a very much larger knowledge to teach the higher subjects, a knowledge that becomes larger the higher you go, and the more the knowledge, the more long and costly the preparation which is required to acquire it; and

therefore, the longer the preparation, and the greater the number of years and the amount of money that must be spent in preparing yourself, the larger the salary which you must necessarily receive when you enter upon the work of teaching. In this respect the analogy of the medical profession breaks down altogether. In the medical profession it is worth the while of the most competent and highly trained young physician or surgeon to begin at a nominal salary in a dispensary in the country, or in the lowest quarters of a town, and to begin work there, practising entirely among the poor, because he is exercising all his faculties, all his knowledge, among the poor just as much as he would be among the rich, and because he is acquiring experience in every case which he takes up. Therefore a man who is going to rise to the height, to the very top of his profession, as the consulting physician of one of the great hospitals, or the owner of a large consulting practice in London, may very well begin on the lowest rung of the ladder, because all his time is well spent, and the experience he gains from all that he is doing will be profitable to him. But we cannot say the same of the person who begins to teach in an elementary school, because, in the first place, there is a great mass of his knowledge which he will not want; nine-tenths, perhaps nineteen-twentieths, of the knowledge he has been acquiring will not be wanted

for the purposes of his elementary teaching, except, of course, in so far as it makes him a better master of the art of teaching itself. But in so far as it is knowledge it will not be wanted; *qua* knowledge it will not be required, whereas a physician requires all his knowledge at every moment. And in the second place, the experience which he is acquiring is not profiting him in the same degree as that of a physician, because his experience in an elementary school is entirely confined to those two or three or four subjects which he has to teach, and he is not getting any experience as to all the rest. Therefore it must be admitted, however reluctant we may be to admit it, that the experience of an elementary school cannot be compared with the experience which the doctor acquires, and that much of the knowledge of the highly educated teacher will rust and be forgotten because it is not used.

Therefore we must come to the conclusion that the ideal of complete unity for elementary teachers, and secondary teachers, and university teachers as one profession, is at present an unattainable ideal —at any rate, it is remote. But it does not follow that we should not work towards it, and I think we may certainly go so far as to say this, that the whole profession ought to be interested in every part of the profession, and that those who teach in Universities and in Secondary Schools ought to render the same amount of help and

sympathy to those who teach in Elementary Schools which they would render to their own immediate colleagues. In that sense the profession is all one; and it is also one in this sense—that what is done for any class of schools benefits the others, and that any rise in the level and efficiency of Elementary Education is very soon felt in the sphere of Secondary Education, and ultimately in that of University Education also.

The Profession and the State. i. Should Teachers be public servants?

Now, if there be, therefore, a unity in that sense, although, I admit, a unity very different from what has been attained in the case of the medical profession, we must approach the next question. What should be the position of the teaching profession towards the State? Should the teaching profession become a branch of the public service? If not a branch of the public service, should it be what is called a close profession—a profession which it is not free for any one to enter unless he passes certain standards officially set up? And, thirdly, should it have representation on public authorities, whether they be central or whether they be local, which are concerned with educational matters?

Now, first, let us see whether it ought to be a branch of the public service. There is no doubt a strong tendency in that direction. You may indeed say that elementary schools have for many purposes already become a branch of the public

service. Of course, they are locally paid, but superannuation has now been made a matter of State regulation by the Act passed in last Session, and that has gone a very long way to make teachers feel themselves to be a branch of the public service. The same process is to some extent coming over our Secondary Schools, because the Endowed Schools are more and more being legislated for, are more and more being brought under public control, and schemes are in the air for imposing a certain amount of public control even upon private schools—schemes upon which I do not propose to pass any opinion, but which, at any rate, are being discussed, and the least measure of inspection will tend in that direction even as regards private schools. In the same way, of course, the offer of scholarships to be competed for by the pupils of private schools must necessarily be accompanied by corresponding conditions to which the private schools would have to submit. It is believed that to make the teaching profession a branch of the public service would make it more efficient, and would add some dignity to it. I think that it must be remembered that there are also some corresponding dangers and drawbacks. Promotion would have to be, if the profession was really a branch of the public service, either by seniority, which is a very slow and tedious process, or else by patronage. And there would be a danger, lest if the teaching profession became

a branch of the public service, a measure of variety and elasticity might be lost, lest too much uniformity might be introduced, lest it might be too difficult to try experiments, and lest people of originality and force who are serviceable to us all in striking out new lines should find it much more difficult to get the chance of doing so. Therefore, I think that those who desire to make the teaching profession a branch of the public service ought to ponder a good deal before they commit themselves to a programme of that kind, not to add that there are always political disadvantages in increasing the range of our public service.

ii. Should teaching be a close profession?

Well, then there is the further question: If it be not a complete branch of the public service, ought it to be a close profession into which persons should only enter by passing examinations and obtaining licenses or certificates? It has to some considerable extent become so already, and no doubt there is a still stronger tendency working that way. The medical profession has virtually become a close profession under the different Acts which have established the examinations for entering the profession. Of course a man may practise without having got a legal qualification, but he practises under considerable disadvantages. The Bar, too, is practically a close profession. The Inns of Court have the exclusive right of calling to the Bar. And

solicitors are under the authority of the Judges and, to some extent, under the control of the Incorporated Law Society. All the legislative proposals that we see tend to make the teaching profession a close profession. The proposals for Registration will, no doubt, have that effect, as I suppose that ultimately registration will only be given to those who pass the prescribed examinations. But I will own to a kind of feeling that there are a great many things in this world which come, which must come, and which even we must help to bring about, but of which, nevertheless, we must feel that we should have been better pleased if it had not been necessary to work for them.

iii. The relation of the profession to proposed Education Authorities.

Now I come to the third question — the relation which the teaching profession ought to bear to the authorities who are to be invested by the State with the control over schools. The State is going to establish authorities —it has established some, and is going to establish others—for dealing with Secondary as well as with Elementary Education, and the question is how the teaching profession should stand with regard to these authorities, whether it be a central authority or whether they be local. Now, on principle, we must all feel that the teaching profession ought to have representation both upon central and upon local authorities, because it will

contribute a sort of knowledge and a sort of experience which is peculiar to its members.

Difficulties as to representation of teachers:

But now let me mention to you some difficulties which beset the practical application of the question of representation.

i. Upon Local Authorities.

First of all, suppose there be established local authorities for dealing with Secondary Education, clearly it would be desirable that the teaching profession should be represented on these bodies. But who should be the persons to elect teachers' representatives to sit upon these bodies? Are elementary teachers to elect or not? If the elementary teachers join in electing, they are electing people to sit upon bodies which have nothing to do with elementary education. Therefore it would appear that they are not to elect. On the other hand, if they are not to elect, you leave out a very large part of the teaching profession, and a part which is indirectly, at any rate, interested. Then there is the further difficulty between the position of the teachers in private schools and the teachers in endowed schools. Teachers in private schools are interested, but they are interested to a very much less extent than teachers in endowed or other public schools will be, because the local authorities will have very much less power over them. Therefore it really is not very easy to find a proper